



Design Responsibility: Potentials and Pitfalls

8th Nordcode Seminar & Workshop

27–29 May 2009

Edited by Malene Leerberg & Lene Wul

NORDCODE

Nordic Network for Research on
Communicative Product Design





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INTRODUCTION





Introduction

MALENE LEERBERG

Is it possible to think about design without responsibility? It is. And we do. On a daily basis design is conceived, manufactured, distributed and consumed – even discarded – without the slightest concern for responsibility. The notion of responsibility does, however, have a strong presence in contemporary design practice and research, perhaps fuelled by a growing attention to the environment, vanishing natural resources, manufacturing ethics as well as cost reduction.

One could easily be led to believe that the relation between design and responsibility is fairly new, nevertheless, designers have at all times considered this relationship. An often cited source, is Victor Papanek, who named a chapter in his seminal 1971 book *Design for the Real World* simply: Design Responsibility. A century before Papanek, in the early days of the Industrial Revolution, William Morris voiced concerns over the effect of mass production on design quality as well as labour and environment. In his 1877 lecture, *The Lesser Arts*, Morris questions the costs of the industrialisation's benefits:

Is money to be gathered? Cut down the pleasant trees among the houses, pull down ancient and venerable buildings for the money that a few square yards of London dirt will fetch; blacken rivers, hide the sun and poison the air with smoke and worse, and it's nobody's business to see it or mend it...¹

1 William Morris (1877): *The Lesser Arts*. Reprinted in Carma Gorman (2003): *The Industrial Design Reader*. New York: Allworth Press: 38. In the 19th century, design was referred to as the decorative or lesser arts.

2 Anni Albers (1943): *Designing*. Reprinted in Brenda Danilowitz (ed., 2000): *Anni Albers: Selected Writings on Design*. Middletown: Wesleyan University Press: 20.





A lesser-known proponent for responsibility in design is fellow textile designer Anni Albers, who in a 1943 essay writes:

The responsibility of the craftsman or the artist may go even further, to that of attempting to clarify the general attitude toward things that already exists. Since production as a whole is ordinarily directed today by economic interest, it may take the disinterestedness of the outsider, the craftsman or artist, to make us critical of the consequences.²



It is assumed that the task of the designer historically was simpler than it is today. This is true; new technologies, globalisation, regulation and politics have added complexity to contemporary design practice as well as research. Nonetheless, the quotes by Morris and Albers demonstrate that designers early on grasped the complexity of design within a mass production system, and its consequences for designers and design practice.

Morris, Albers and later Papanek, among others, respond to cultural and social changes of their times – and concern for the future. They recognise that designers are potential change agents, but are designers able and willing to take on the responsibility?

Design theorist Victor Margolin picks up this thread in his 2007 essay *Design, the Future and the Human Spirit* and asks: How does a designer formulate a role as a change agent and determine a course of action? As an activity design is oriented towards the future, and a designer is informed by both the past and the present.

This is by no means an easy role to inhabit as Margolin explains:

Envisioning the future is a problematic enterprise, given the cacophony of competing visions that describe how the world could or should be. This puts designers and the design professions in a difficult situation... they have a unique ability to give form to plans and propositions, yet they lack broad and coherent social scenarios to guide their work. Although design is implicated in all human activity, there is little in the typical design curriculum that prepares students to imagine such scenarios.³

Arguably, it is difficult to take on responsibility as a designer, if not adequately prepared for the complexity of the task. This makes it all the more important to share and disseminate experience, knowledge and methods from design practice and research. With this in mind, *Design Responsibility: Potential and Pitfalls – the 8th NORDCODE Seminar & Workshop* intended to address the increasing focus on responsibility in contemporary design and design research.

The Nordic Network for Research on Communicative Product Design, known in short as NORDCODE, organises seminars and meetings on design research, especially concerning design's communicative aspects.⁴ In the call for *Design Responsibility: Potential and Pitfalls*, held at Kolding School of Design May 27 to 29 2009, we explained



³ Victor Margolin (2007): Design, the Future and the Human Spirit. *Design Issues* vol. 23, no. 3, 10.

⁴ For more on the NORDCODE network, please refer to the network website: <http://www.nordcode.net>.



that the aim of the seminar was to bring issues such as functionality, sustainability, ethics, aesthetics and signification into play and examine the potentials and pitfalls of design responsibility in connection to the communicative aspects of design. We invited participants and contributors to explore topics such as design aesthetics, research methodology, design processes, form experience and pleasure, and cultural and social signification of design. Four questions were posed for inspiration:

- What does the notion of design responsibility entail for design research and design practice?
- How can design responsibility be used or be useful for designers and in design research?
- What is responsible design – and what is not?
- How is responsibility communicated in design and design research?

The contributions for *Design Responsibility: Potential and Pitfalls* came from both designers and design researcher, and provided a broad range of perspectives on design responsibility – from a practice point of view, from analytical, ideological and ethical points of view. Presentations were followed by lively and positive discussions, and if we in the closing session of the seminar had asked the participants: Is it possible to think about design without responsibility? Surely, they would have answered: No!

⁵ A few reading guidelines need to be mentioned. If not otherwise specified, photographic material is by Jens Christian Hansen. All Internet references have been checked and are available as of June 20th 2012, unless otherwise stated.

THE FORMAT AND CONTENT OF THE PUBLICATION

The idea for the publication came about almost at the same time as the idea for the seminar was conceived. We wanted the format to differ from the run-of-the-mill conference proceedings and in particular, we wanted the publication to visually reflect the general subject of the seminar: Design. Furthermore, our aim was to present more than a selection of seminar papers with the seminar abstracts, we aspired to represent the seminar and the workshop as well. Thus, in the following section, entitled TEXTS, we have between the papers dispersed eight vignettes to communicate the content of the workshop as well as the relationship between the topics of the seminar and the workshop. Following the TEXTS section, the publication concludes with an ABSTRACTS section, which presents a collection of abstracts from the seminar to show the diversity of the presentations and to encourage further discussion among designers and researchers.⁵

The papers included in the publications present diverse perspectives on design responsibility, and thus represent the complexity of the topic – the potentials and pitfalls – especially regarding the communicative aspects of design.

The opening paper, by Martin Woolley, discusses responsible design in relation to current economic and environmental challenges. The paper takes its title from Tom Wolfe's 1979 book, *The Right Stuff*, which tells the story of the 1940s and 1950s test pilots and astronauts, who paved the way for the United States' manned spaceflights from the early 1960s and onward. Wolfe's story is about innovation and more importantly about courage. Thus, Woolley with his text implicitly asks whether today's designers and indeed design researchers have *the right stuff* to respond responsibly to the challenges at hand.



Design Responsibility: Potentials & Pitfalls
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May 27 to 28 2009

He explores several hypothetical models, which might facilitate a more responsible approach to design through engagement with, rather than dictation to, the end-user. To accomplish this, Woolley claims, design needs to be more firmly embedded across the political, social and economic spectrum, rather than continuing to focus purely on incremental change or isolated innovation. The paper argues that ultimately responsible design will only be effective if matched by responsible consumption.

Whereas Woolley situates design on a grand scale political agenda, Martina Maria Keitsch examines the small print, so to speak, of the ideological implications of metaphors in design discourse. She notes that in recent years the design discourse have emphasised the importance of metaphors for design theory and research. However, there is a widespread inclination to use metaphors uncritically in design texts, which, Keitsch argues, can be disadvantageous not only for understanding concepts but also for employing them in design practice. Within this debate, the paper investigates what she calls *hidden* ideologies in design texts by tracing and analysing definitions and metaphors in *pragmatic* product design, social design and eco-design writings.

Ideology is an undercurrent theme in Marie Riegels Melchoirs paper as she examines the national branding of Danish fashion. Despite near-death predictions for the fashion industry in the late 1980s, when manufacturing of clothing in Denmark was outsourced to low-wage countries in Eastern Europe and Asia, Danish fashion has within the last 10-15 years become a success story. Today, the pride in the concept of Danish fashion is based on a belief in promoting difference through design for economic benefit in an otherwise globalised industry. However, Melchior asks, is





national branding
a responsible poten-
tial for fashion design?

As she explores the construction of Danish fashion as a brand, Melchior furthermore reflects on the role of research and the responsibility of researchers in the politicised field of branding and national design policy.

With Nicholas Rhodes paper we make a move into design practice as he examines a phenomena rarely associated with responsibility: Luxury. Historically, luxury was only attainable for a very few select individuals, whereas today, it is within reach for many consumers. To understand the nature of luxury, Rhodes considers the different meanings of the phenomena and seeks to find a working articulation of the luxury experience. Referring to cultural studies as well as neuroscience, the paper discusses some of the impulses that drive luxury consumption and reflects upon the persistence of certain assumptions and taboos based on age-old discourses of exclusion and desire that continue to constrain design in the luxury sector. Finally, Rhodes proposes that the objective for designing luxury, whether material or immaterial, is to induce an experience of crossing-over from everyday life into another state of being.

An interview with Boris Berlin takes us all the way into the design studio. We sit down among sketches, models and design objects to have a talk about design responsibility and irresponsibility. Berlin and his partner of KOMPLOT Design, Poul Christiansen, have been praised for explicitly addressing the subject of sustainability and responsibility in design; an example is their 2007 NOBODY chair. As we talk about various chair designs by KOMPLOT, we discuss different aspect of responsibility in design practice. Along the way, Berlin reminds us that you cannot be responsible all the time. As a designer, you sometimes have to forego

responsibility, you have to be playful, to be childish in order to be creative – you need a little bit of irresponsibility to be a responsible designer.

Design can prompt or support behavioural change, and the paper by Simone Marian and Alvisè Mattozzi explores how a semiotic approach to design may contribute to changing our relationship with everyday design objects. They first analyse the new Smart Meters, recently installed in basically all Italian households by the national electric utility company. Then, they present the design of a new electric meter, called Espy. As opposed to the customary use of the Smart Meter, Espy is designed to be visible in the home and to communicate electrical consumption through visualisation; the aim is to remediate the way consumption is – or is not – taken into account by the existing Italian Smart Meters. Marian and Mattozzi argues that Espy is an example of responsibility through design, and shows how semiotics can be used to describe the relations articulated by one artefact and then employed to rearticulate these relations through another design.

The last two papers address issues of design collaboration and design research in environments, which are often peripheral to the design discourse. First, we take a journey to the streets of Kolkata in West Bengal, India, to meet local food vendors and consumers as Marie Louise Møllebæk Larsen and Hanne Lindegaard present The Street Food Project. This project was initiated by the international network InnoAid.org with the objective to enable local, lower income, Indian entrepreneurs to serve healthy and hygienically prepared street food, by developing and introducing a set of open-source solutions within capacity development,





infrastructure, education, and product design. Combining anthropology with a socio-technical approach, Larsen and Lindegaard describe the development of a design game, functioning as a *boundary object* between two different networks: InnoAid.org and the local street food stakeholders. Acting as a *non-human actor*, they argue that the game served a double purpose: To bring new knowledge to the stakeholders about hygiene and health, and to explore how street food vendors could improve their livelihood through improved marketing, focusing on the costumers' needs and vendors' values. Larsen and Lindegaard demonstrate how design games as a tool for collaboration can provide new insights and knowledge to both researchers and participants.

In the final paper, Arild Berg presents a case study, which geographically is closer to home, yet the context is unfamiliar to most designers and design researchers. Berg's case is situated at a Norwegian mental health care unit for elderly people, where he worked with staff and patients on a material based art project. Like Larsen and Lindegaard, he explores the potentials – and pitfalls – of participatory and collaborative processes. As an artist researcher, Berg is concerned with the relationship between the participants involved in the process and how the artistic process and output affect communication. He exemplifies how introducing art in the context of mental health care provides new kinds of intellectual stimuli for both staff and patients. For the artist, Berg argues, this type of cross-disciplinary collaboration can lead to new insights, which then inspires to new, innovative products with other types of communicative qualities. For research, similar collaborative explorations in other contexts may contribute to further develop the knowledge of participatory design.









Twiggy, 1966





ACKNOWLEDGEMENT

This publication has been long in the making. Three years to be exact. At times, it seemed we would never finish, yet as editors we felt a responsibility to carry on due to the quality of the contributions as well as the support we received from the early ideas for *Design Responsibility: Potentials and Pitfalls – the 8th NORDCODE Seminar & Workshop* to the finishing touches of these pages.

First of all, we thank all the participants at the research seminar and workshop. You contributed with interesting paper presentations, insightful questions and engaging discussions. We hope that the book to some extent have captured the energy and enthusiasm that all of you brought to Kolding. Secondly, we are grateful to our authors and interviewee – you have all been both very patient and encouraging throughout the process. In return, we hope that you will enjoy the outcome. Thirdly, our thanks to the NORDCODE network, which not only gave Kolding School of Design the opportunity to host the annual, international research seminar and workshop, but whose representatives Susann Vihma, Toni-Matti Karjanleinen, Victor Hjort Af Örnäs, Martina Maria Keitsch, Anders Warell and Torben Lenau all got involved to make it a great event.



The research seminar and workshop as well as this publication could not have been realised without funding from NORDCODE, the Danish Centre for Design Research and The Danish Doctoral Schools of Architecture & Design – we thank you for your generous support.

A number of individuals also played a pivotal role in the process: Thomas Leerberg welcomed the opportunity of hosting the research seminar and workshop at Kolding School of Design and Poul Rind Christensen carried out the hosting duties; Anne-Louise Bang helped organise the workshop; Jens Christian Hansen photographed the event and provided us with valuable visual material for the book; Marianne Baggesen Hilger assisted with language revision; and Vibeke Riisberg cheered us on from the very beginning to the very end. Last but not least, we must give a shout-out to our talented graphic designer Karina Petersen, a 2009 graduate from Kolding School of Design, whose passion for book design shines through on every page.

design and social



-gratificati

comm
family

crime

change – a moving footprint

affluence



noitscirtip-





TEXTS



MATERIALS
EXPRESSION
FROM PREVIOUS USE

CRITERIA
FOR
DESIGN

When can you find a new
OR DE KAN FINDE perspective

Design Practice
in Transition

RELEVANCE

FORMAL DEVELOPMENT

METHODS
(CONCEPTS)

HERITAGE

EARLY
IN THE
PROCESS



How do
we design
everyday
products
to be
best in life?

ECONOMICS

MATERIALS HAVE
TO BE TAKEN
MUCH MORE
INTO ACCOUNT
TO CREATE
ENRICHING
EXPERIENCES

DESIGN RESPONSIBILITY TAGWALL

A tagwall was created as part of the seminar. The tagwall had five sections, each dedicated to a topic within the theme of design responsibility:

- Ideology and design
- Discourse on design
- Criteria for design
- Research and design
- Ethics in design

All seminar participants could contribute to the tagwall with thoughts, statements and visuals.

users' heritage
to bring them
into the future

↓
methods
co-design (p)

The best
thing in
life are
free
% more longterm
process brings
greater value

HERITAGE
(BASIS)
AS A FACTOR
FOR A NEW
DESIGN
PERSPECTIVE

DESIGN PRACTICE
IN TRANSITION

DESIGN PRACTICE
IN TRANSITION

Less
conscious
More
aware

“

The word

design

is a generalised term, which

lacks a sense of scale...

Design responsibility

**escalates with the scale of
the problem,**

so in order
to effect change

we

need

to have a

clearer

understanding of

the numerous ways

that design might adapt

to the magnitude of a given problem.


”

Martin Woolley

The Right Stuff – Design, research & responsibility

MARTIN WOOLLEY

Martin Woolley is a Professor and Associate Dean of research at the School of Art and Design, Coventry University, in the United Kingdom. Previously, he has held professorships at Central Saint Martins College of Arts & Design, Goldsmith College and Bingham City University. With an MDes in Furniture Design from the Royal College of Art, he earned his PhD entitled *Design, Product Identity and Technological Innovation* at Sheffield Hallam University.



The issue of just what constitutes *responsible design* is complex and variable, touching on a wide range of concerns – from ethics to environmental sustainability, personal safety to social problems. At a broader level, it challenges the fundamental relationship between producer and consumer and the degree of profit-driven *exploitation* in relation to the *genuine* interests of the consumer and wider society – both short and long term. In this context, the term responsible design can take on a faintly patronising connotation; given that it seeks to determine what's best for the consumer, in contrast to addressing the consumers own wishes. In this sense, it might be argued that responsible design runs counter to the parallel democracy of product choice, even if this choice is somewhat limited in practice. Thus, responsible design might be seen as the difference between the fulfilment of market-driven consumption, perhaps indifferent to wider negative consequences, and design, which addresses the collective, long term interests of society and beyond. This is a polemic viewpoint and the reality is less clearly delineated, particularly at times of global financial instability – when new responsibilities are prioritised, such as reinforcing *essential* industries or securing the banking system. Equally, dire economic circumstances may result in government bailout funding, which comes with special conditions, often in the form of new societal responsibilities.

We are in the mother of recessions; banks are bust; businesses, even countries are bankrupt. We will emerge from this economic wreckage into a different landscape, where it was never more important than to be educated. Furthermore, the new commercial and lifestyle reality is a very visual one in which art and design play an increasingly important role. Not only in training practitioners, but as business and social leaders (*Fitch 2009*).¹

The severity and global span of the current recession has raised some fundamental questions about the economic system, consumer society and the position of design within it. In developed countries, the past twenty years were a relatively lengthy period of unprecedented growth, which ultimately spiralled out of control. During this period, an unconstrained globalised market economy provided a new commercial energy, which took contemporary design from a minority interest into the commercial and public mainstream, resulting in enhanced lifestyles combined with a rather hedonistic shopping culture. Aligned with the new Internet communication/retail systems, intensive consumer media coverage and online retailing, the primary *responsibility* was to drive the expansion of the culture of designed-led, mass consumption at an increasingly competitive level. Some now see this as an economic sleight-of-hand, bordering on the criminal, which brought little economic benefit to the wider population:

In fact, the much-vaunted 'creativity' of the financial markets since 2001 boils down to little more than the invention of extraordinary mechanisms which increase the circulation of capital through the system (enabling revenue to be skimmed from each stage in the process) but which do not actually create wealth (*Dilnot 2008*).

To a degree however, this emphasis on mechanistic, expanding consumption has an inbuilt propensity to address some responsibilities, particularly those that contribute to the brand or emphasise altruistic credentials appropriate to the targeted market, whether significant or not. Unfortunately, even here there is often a conflicting ambition, whereby personal product usage may address immediate individual responsibilities, whilst ignoring long-term and collective responsibilities.

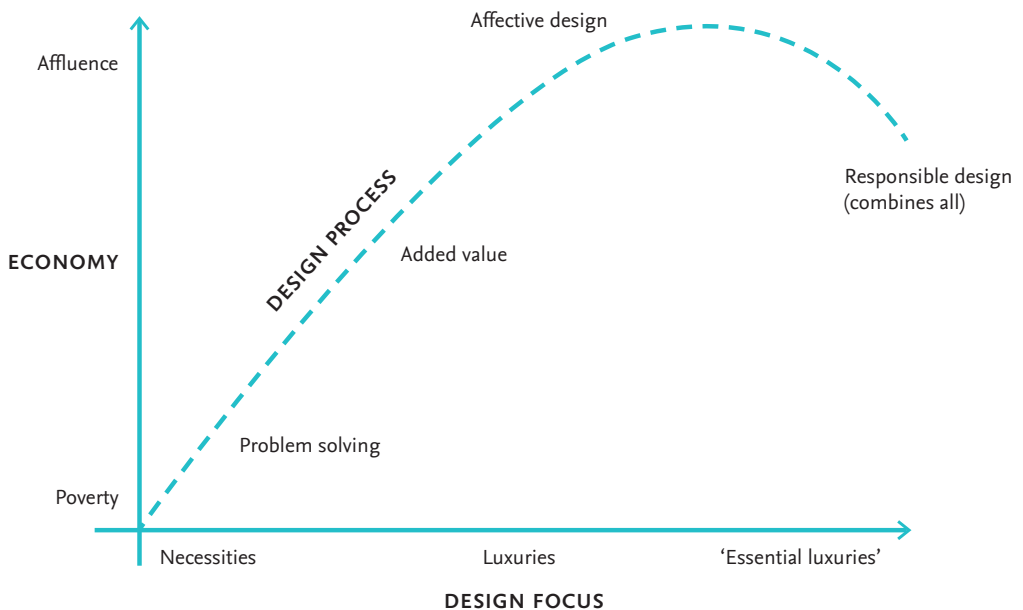
White goods, for example, may meet increasingly stringent energy consumption figures, whilst exploiting the repeat purchase potential that built-in obsolescence engenders. Most products are designed to last for a predetermined period, meeting a balance between product longevity and planned failure to encourage repeat

¹ Rodney Fitch, Chairman and Founder (1972) of the design consultancy Fitch, from a speech given at the launch of Central Saint Martins College of Arts & Design Twentieth Anniversary celebrations, exploring the status of art and design education in Britain. *Rodney Fitch CBE in Conversation*, 11 May 2009, Cochrane Theatre, London.

product purchase after a *respectable* period (such as five years for many white goods). Other issues: product safety, physical durability, and operational enhancement play a similar role, both reinforcing the long term brand and stimulating pre-purchase consumer interest; an expanding consumer review media sector sustains this quality equilibrium. The market is intermittently capable of self-regulation, so design responsibility is also potentially self-regulating on occasion, given its integration with the producer's brand and reputation.

Equally, it cannot be assumed that responsible design is automatically synonymous with responsible consumption, a highly successful consumer product might be deemed comparatively irresponsible by other non-consumers. The problem with consumption as the driver of design responsibility is that it is inconsistent and ultimately incapable of rational prioritisation, particularly in relation to concerns opposed to the expansion of consumer culture; for these aspects, imposed government regulation would seem to be the most likely solution. However, regulation is a blunt tool suitable only for easily defined, quantifiable areas such as carbon emissions. It is less well suited to more diverse design decision-making, where stringent self-regulation is a more realistic alternative. In this context, the current recession might well act as a catalyst, creating new imperatives, which target the wider global population, rather than merely the affluent consumer. It is worth noting that U.S. General

FIGURE 1: DESIGNING THE ECONOMY



Motors has been forced to address innovative energy saving technologies in a short space of time, thanks to stringent economic and political pressure.

The task of defining responsible design with reference to economic constraints can be as elusive as defining the highly varied process of design itself, which is both diverse in terms of its applications and open-ended in terms of practices and practitioners, hence there is no simple or single definition. Responsible design also varies considerably according to its socio-economic context. Figure 1 illustrates the changing nature of design in relation to the degree of poverty or affluence, with a focus on elementary problem solving engendering design solutions which add practical/aesthetic value to the rudimentary volume products associated with developing nations. In the current situation with a declining economy, new forms or levels of responsible design are likely to be necessary to make the most of reduced and increasingly costly resources, limited consumer spending power and environmental challenges; defining responsible design in terms of a combination of problem-solving, added value and affective design. The model suggests that during severe economic downturn, it is necessary to adopt a more balanced, general view of the design process. A process, which simultaneously addresses the basic needs and problems associated with social inequality, whilst drawing on accumulated design experience of how to add value and even affection, at low cost. It finally includes the more recent expertise on affective design to ensure that products have sufficient emotional appeal to create lasting relationships, which slow down some artificially stimulated *wants* associated with overheated consumption.

It has proved difficult for some financial analysts to predict the true nature and long-term outcome of the current global financial crisis, but the impact on the consumer market is much clearer. The recession has caused us to question the fundamental nature of the banking system and the market-driven economy, it has led to questions about the role of design within society and ultimately to how it might be applied more responsibly. As in the underlying financial crisis, this raises the question of how the irresponsibility of the few can sometimes have an impact on the wellbeing of the many: Thus, a gas-guzzling car, whilst an expensive plaything for the minority that can afford it, threatens the environment we all depend upon. The linked question is: Can design contribute to a fresh *responsibility for the many* culture? In order to facilitate this, should design be repositioned at a more politically effective level? Finally,

where are the limits of design relative to responsibility and how far do they depend on an ethical contract, which demands an equally responsible consumption?

Shifting economic realities also raise the issue of the direct impact of the recession on patterns of consumption, the most obvious effect being diminishing disposable consumer income, and an accompanying change in consumer interest on *needs* and *affordable wants* rather than luxuries. Evidenced in many ways through: The emergence of the leaner, price-cutting retailers as more successful in comparison with their more up-market counterparts; the subtle challenge of retaining design quality, whilst simultaneously reducing retail costs, which might be a means of driving design as an agent for responsible change, making quality available to a wider consumer base.

THE SCALE OF THE PROBLEM

The word *design* is a generalised term, which lacks a sense of scale; it is applied to everything from one-off paper-folding to the development of a passenger airliner. Design responsibility escalates with the scale of the problem, so in order to effect change we need to have a clearer understanding of the numerous ways that design might adapt to the magnitude of a given problem. Figure 2 explores the ways responsible design might adapt in scale, magnitude and the degree to which it is *embedded* in the political system. At the most common extreme, traditional design tends to address small-scale, incremental issues such as product updates, which can usually be undertaken by a single designer or small team, operating within a discreet organisational context, essentially as a bolt-on sub-component of the overall production process. When a greater degree of innovation is required, a broader and more integrated design team, with design permeating the organisation is necessary. Further along the spectrum, when the requisite change is fundamentally radical, it requires design, which is fully embedded within an advanced organisational context. Thus, for example, design utilised within the context of a major global disaster such as flood or famine, can only be effective if carried out within a substantial and well coordinated organisational context requiring political, social and economic cohesion.

Lastly, with the predicted, long term global challenges that threaten to overwhelm, such as environmental degradation or economic melt-down, design has to be fully embedded within the extended socio-political system and require the same degree of politi-

FIGURE 2: THE SCALE OF THE PROBLEM

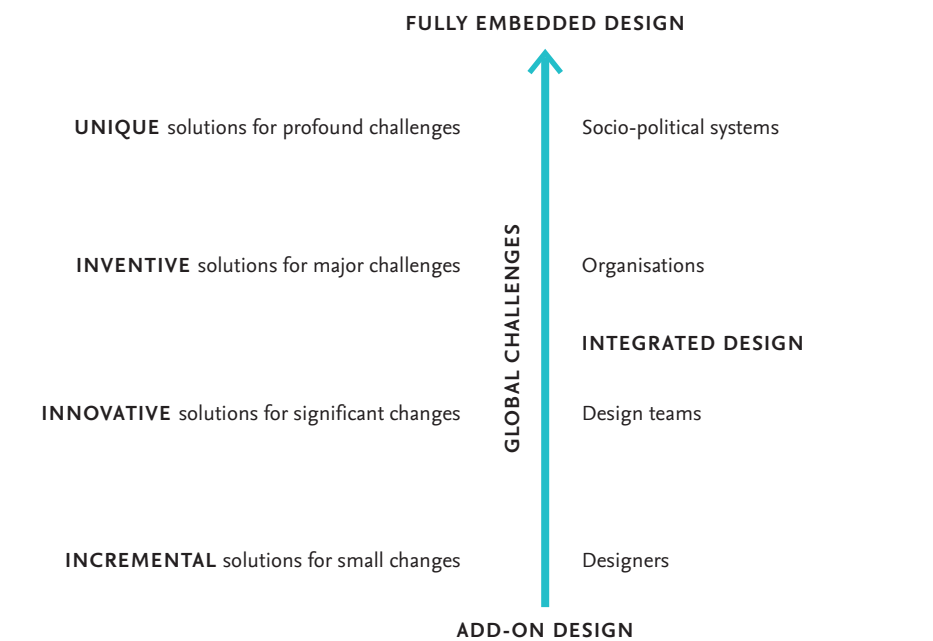
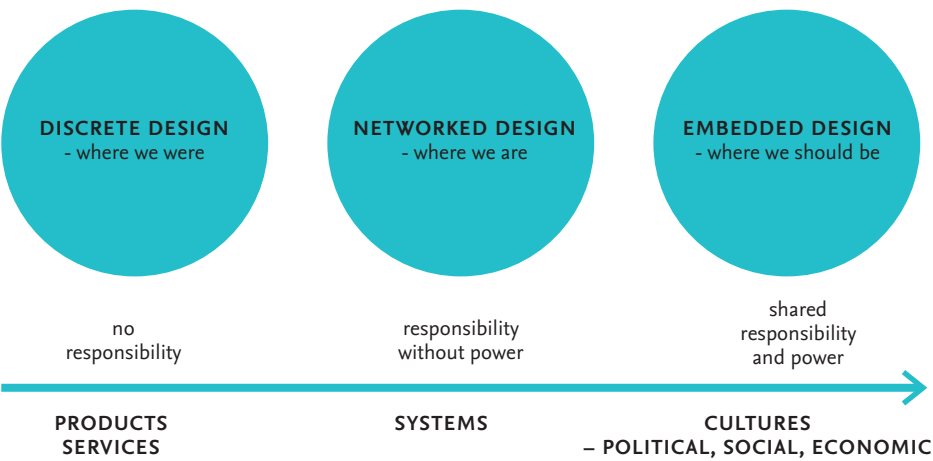


FIGURE 3: RESPONSIBILITY + POWER



cal and professional acumen that other spheres of influence possess. In short, it depends on negotiated political alliances rather than single organisational systems. Of course, small design changes can sometimes have a profound social impact. However, for significant global responsibilities to be addressed, it is essential that design moves from relative organisational isolation into a fully embedded position. This would avoid the common tendency to adopt responsibilities at a micro rather than macro level and thereby deal only with individual product-related responsibilities – which in any case, often possess a degree of tokenism (e.g. *greenwash*), rather than acquiring a broader responsibility commensurate with the magnitude of the challenge. Figure 2 illustrates this transition, essentially moving design from an *add-on* function, to design as an integrated activity operating globally across comprehensive alliances.

A complementary approach in figure 3 explores the subtle relationship between *discrete design* and *embedded design* through a time-based sequence. This model assumes that discrete design does not move beyond the common responsibilities associated with individual products and services, which was the previous norm. More recently, with the advent of networked design, such responsibilities have become devolved, pervasive and extend outwards to begin to address more concerns, well beyond the narrow product/service function. However, networking does not equate with political power, it is usually limited to shared, lateral experience, which facilitates a cooperative or systems approach to design (e.g. open source software development) with an emphasis on rapid communication rather than resolving issues of responsibility. In the future, it is possible to envisage a more ubiquitous form of design that operates within, and contributes to, the overarching political system and is deeply embedded in the global political culture.

Whilst the term *responsible design* has a contemporary ring, it is important to recall that it also has a long history:

By drawing on design's historical roots, the SRD² model builds of design's commitment to social responsibility, which predates the activities of designers from the 1970s and 80s, and includes: design movements of the 19th century that sought to improve working conditions for craftspeople; individuals such as William Morris (1878) who believed that design was a vital and potent source for improving the human condition; and government initiatives where design is used to enhance quality of life (Wilhide, 1999). It also links with more recent authors who highlight the role of design in improving the human condition, not simply the biological and physical environment (Findeli, 2001) (Davey et al. 2005, n.p.).

² SRD is short for Social Responsible Design.

The only difference between these earlier manifestations of responsible design and the current agenda is the necessity of breadth – to also address global imperatives such as finite resources, cultural diversity and environmental sustainability.

In terms of both historical and contemporary contexts, responsibility is rarely intrinsic to design as a process but more frequently relates to the nature and limitations of practice, specifically to professional practice. The noun *design* is a neutral term, with a capacity to embrace both the responsible and the irresponsible. Professional practice acquires restrictions, which severely limit the ability of design to adequately address responsibility beyond the immediate consumer and regulatory contexts, which in turn limits the designers' ability to engage with a wider constituency and remit. There are several reasons for this: Firstly, that design practice often fulfils a service rather than a leadership function, particularly in terms of consultancy and in companies, where the design element is positioned as a *bolt-on* function rather than as a part of strategic planning. Secondly, design practice is now highly professionalised and therefore a partisan activity with narrow allegiances to client, company shareholder and consumer. Thirdly, design education has a self-limiting remit, which is only engaged with the development of practical skills and imparting design knowledge, it is normally an education, which does not set out to attract or equip graduates with the ability to address design concerns at a global political level. Finally, and closely related to the education of the designer, is the resultant restricted access to the reins of power, control and information that would facilitate an effective global approach to design responsibility. There needs to be an ambition from the wider profession to provide an important minority of designers with these overarching skills and a voice that will take them to the seat of political power to both influence and be influenced.

FROM PASSIVE CONSUMER TO PROACTIVE DOER

With the possible exception of early parenthood, most human activities, which involve serious responsibility, usually require that this is a two-way process, in which responsibilities are, to a degree, shared between the provider and the receiver. In developed societies for example, the democratic process is essentially seen as a contract between the decision-makers and their constituents, with the latter able to depose the former if responsibility falters. No such democratic processes are embedded in the producer/consumer relationship, however there are analogies between the way the market operates and the democratic process. With advertising akin to party promo-

FIGURE 4: FROM PASSIVE CONSUMER TO ACTIVE DOER

**REDUCING THE GAP BETWEEN DESIGN & USE VIA:**

- open innovation
- new user/designer synergies
- democratising making

tion, product purchases are a form of vote, and consumer research similar to political media reports. As with the political system, for consumerism to engage with wider responsibilities, it has to move from an essentially passive, one-way process to a proactive, two-way engagement. Figure 4 demonstrates some of the ways in which this might be achieved.

Thus, with few exceptions, responsible design needs to be matched by responsible consumption, whether the latter is formally regulated, such as enforced recycling schemes, or informally via free consumer choice, such as the choice of organic produce. To this extent, most design for the mass-market can be said to involve an unwritten contract, in which aspects, such as safe usage and considerate disposal, are communicated with an expectation that they should be fulfilled. Indeed, with the prioritisation of serious environment concerns, there appears to be an increasing expectation that consumers will uphold their end of the *contract*. Some products promoted on the basis of their environmental credentials are designed to stimulate consumer responsibility: For example the Toyota Prius encourages energy efficient driving technique through visual feedback along with automatic fuel saving technologies. To a degree this represents, and also responds to, a fundamental change in the nature of the consumer – moving from an essentially passive role as user, operator, specifier, buyer, purchaser, client, to a more active role, involving more responsibility and decision-making in the form of prosumers, members, partners, stakeholders, shareholders, co-creators, makers and doers. This shifting consumer position has been partially

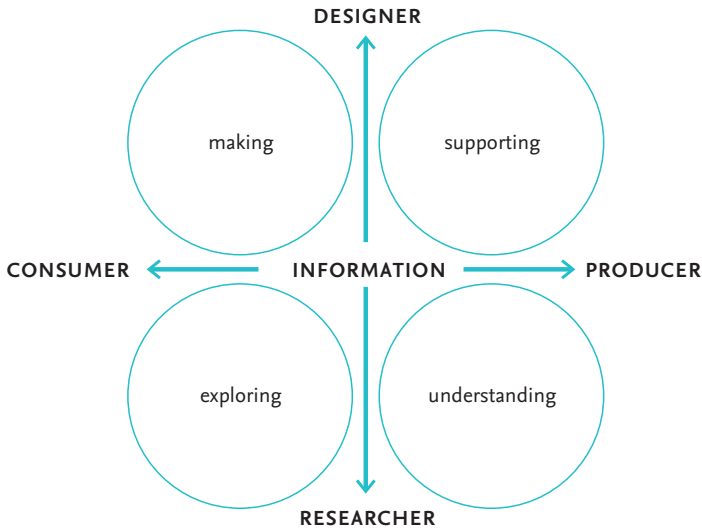
determined by different ways in which the gap between user and designer and/or producer/consumer has narrowed. This narrowing has occurred through novel processes such as open innovation and improving the level of consumer knowledge through online communications, which can both help to democratise production.

If we get better, more complete information about the true effects of an item at the moment we are deciding whether to buy it, we could make wiser decisions. Such full disclosure can make each of us an agent for small, gradual changes that, when multiplied by millions, will ripple through the industrial enterprise, from manufacturing and design, through supply chains and transport, to the distant ends of consumption (*Goleman 2009, n.p.*)

To a degree, the *democratisation* has involved the growth and the increasingly widespread dissemination of consumer information, and the new proactive and responsible status of the consumer depends ultimately on the quality and accuracy of available information, in order to make appropriate decisions.

Since the dawn of the industrial age until the present time, via the growth of the Consumers Association and other campaign groups, (albeit with an essentially middle class constituency) there has been a steady improvement of such information in terms of accuracy, objectivity and access. The shift and changes in perception and participation have so far taken three broad forms: Initially consumers were entirely dependent on what producers told them about their products. Later on, product review systems developed via the press and other media; further down the line, these review systems became more systematic and objective via consumer organisations. Most recently, the Internet has facilitated a less formal and more diverse sharing of consumer experience, for example via interactive product websites and blogs. Through the latter stages of these developments and iterations there has been an extension of responsibility from exclusive preoccupation with personal consumer satisfaction: Does the design work for me? To embrace broader concerns – is the product a low pollutant? Consumer information reflects this transition – having moved from the simple testing and elucidation of product attributes, to indications of environmental and social impact. Indeed, it can be argued that we have now reached a tipping point, in which the sheer quantity and diversity of consumer information threatens to overwhelm and hence underwhelm the consumer. In which case, the next phase of development may well be focussed on directing appropriately customised information at the right time, rather than continuing to generate even more data for

FIGURE 5: SHARED RESPONSIBILITY REQUIRES SHARED INFORMATION



From information about food additives to equivalent product/service additives

its own sake. As many commentators have pointed out, with RFID technology and beyond, it is perfectly possible that products will communicate directly with the consumer and generate all kinds of information including that which is deemed necessary for responsible consumption.

But considerations, which include an assessment of the kind of information necessary to encourage responsible design and consumption, also raises questions about where the information is obtained, its quality and how it is delivered. Figure 5 outlines one possible model of many, in which the designer, consumer, producer and researcher are all assumed to have equal access to filtered and edited web-based design information as it emerges; on the assumption that *information equality* and transparency will further the democratisation of design and hence the sharing of responsibility. The need for selectivity and editorial functions could be devolved to a specific research communication function, which would be aligned with external ratification – potentially in Wiki form. In relation to responsible design, such information would inevitably be diverse, and to some bewildering, but it could for example, address the potential environmental footprint of the product, cradle-to-grave, disassembly information, energy audit of production and use. An internationally agreed format, with standardised levels of expertise, would further enhance the devolution of responsibility between the producer and consumer communities.

DESIGNING FOR PEOPLE – NOT JUST CONSUMERS

Taking this broadening of responsibility further, one major aspect of design responsibility has to relate to an agenda, which is primarily about designing for people as opposed to designing for consumers. Whilst the latter is almost exclusively concerned with satisfying, and sometimes creating, the short term personal desires, preferences and needs of the individual. The former embraces a wider design perspective, which encourages design appropriate for the sustainable, long term, benefit of the population as a whole. Implicit, is a recognition that globally we can no longer afford to enhance the resource-hungry lifestyle of the individual without considering the wider implications, whether these are social, environmental, economic or health-related. As part of this focus on the collective, there is an inevitable need to re-embrace notions of community, albeit reinterpreted in line with our global, digitally networked contemporary society.

In a 2009 public debate at Central Saint Martins College of Art London, Matthew Taylor provided four useful examples of where the emphasis might lie in this situation: Firstly, by enabling people to become *the people they need to be* via education, social action and embedded design. Secondly, by developing resourcefulness in the community and finding ways of releasing it. Thirdly, by stimulating communal resourcefulness: Such as the new interest in *grow your own* food movements and the radicalisation of crafting via the Internet. And finally, by engaging, instead of isolating, people through design.³

Clearly responsible design is predicated on such strategies intended for social development and cohesion; and through this, designers' longer-term intention to provide fulfilment and social engagement. This approach might be viewed as the antithesis of *personal* technologies and products, such as MP3 players, cinematic quality television sets and home gyms, which can lead to social isolation rather than communal interaction. However, it is often possible, even with disruptive technologies that are initially isolationist, to reconfigure the technologies and provide new social contexts. The relatively recent development of socially interactive *Web 2.0* sites is perhaps testimony to this.

The implicit difficulty for the designer is how to predict what may, or may not, be socially enriching with such a high level of disruption – a strong argument for increasing the level of user research into prototype technologies as they emerge, prior to market.

If such worthy goals are to be addressed, what kinds of additional design process changes are required? Broadly as we need to engage more fully with design, which is socially responsive and

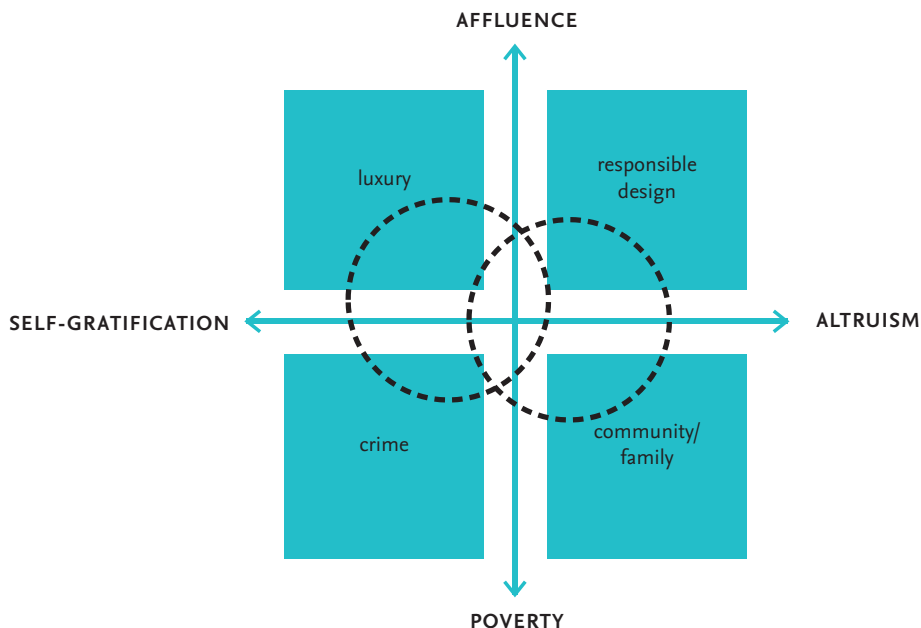
³ Matthew Taylor, Chief Executive of the Royal Society for the Encouragement of the Arts, Manufactures and Commerce (RSA), from a speech given at the launch of Central Saint Martins College of Arts & Design Twentieth Anniversary celebrations, exploring the status of art and design education in Britain. *Rodney Fitch CBE in Conversation*, 11 May 2009, Cochrane Theatre, London.

culturally sensitive. This may well need to take place in a broader range of organisational contexts than just conventional commerce and industry. An integral element and part of this is the requirement for design, which offers genuine and not just superficial choices. Unfortunately, much commercial design has become adept at addressing minute product adjustments and variations rather than providing distinct, radical alternatives. Thus, competing products display infinitely more commonality than difference and we therefore need an *innovation of choice* rather than an *innovation of replacement*. In addressing the wide range of societal factors previously discussed, there needs to be a broader design process, which is alert and responsive to a range of constituencies and underpinned with appropriately targeted information retrieval and research processes. And last, but not least, with pressing environmental factors design would clearly have to optimise, and assess, long-term environmental performance.

DESIGN AND SOCIAL CHANGE – A MOVING FOOTPRINT?

Of course, the move to an extreme form of responsible design would run the risk that whilst creating worthy and appropriate design outcomes, they are ultimately unattractive, predictable and generally unappealing to the consumer. Thus, it is perhaps essential that

FIGURE 6: DESIGN AND SOCIAL CHANGE – A MOVING FOOTPRINT?



rather than a disruptive quantum leap into the unknown as figure 6 illustrates, perhaps a major shift in focus is required, which still retains and capitalises on contemporary design experience and quality. Not least the ability to engage with human emotion.

Figure 7 summarises our current obsession with lifestyle i.e. a focus on the individual, usually at the expense of the collective. The final column placed alongside the lifestyle list contrasts with the concept of responsible living, which seeks a more harmonious balance between the two.

FIGURE 7: FROM LIFESTYLE TO RESPONSIBLE LIVING?

		LIFESTYLE	RESPONSIBLE LIVING
SOCIETY	KEY CHARACTERISTIC	success	fulfilment
	FOCUS	self	society
	ENVIRONMENT	exploitation	maintenance
	ECONOMY	deregulation	re-regulation
DESIGN	PRIORITY	originality	ethics
	PROCESS	marked-based	research-based
	OUTCOME	isolated	integrated
	CHARACTERISTIC	the personal	the collective

The economic crisis is seen as one possible catalyst for such change, which would be addressed:

- Partly by requiring new ethical standards,
- by placing an emphasis on design thinking, which seeks systematic integration rather than individualised products,
- and by seeking a new role for design research, which is active at a more considered significantly senior political level.

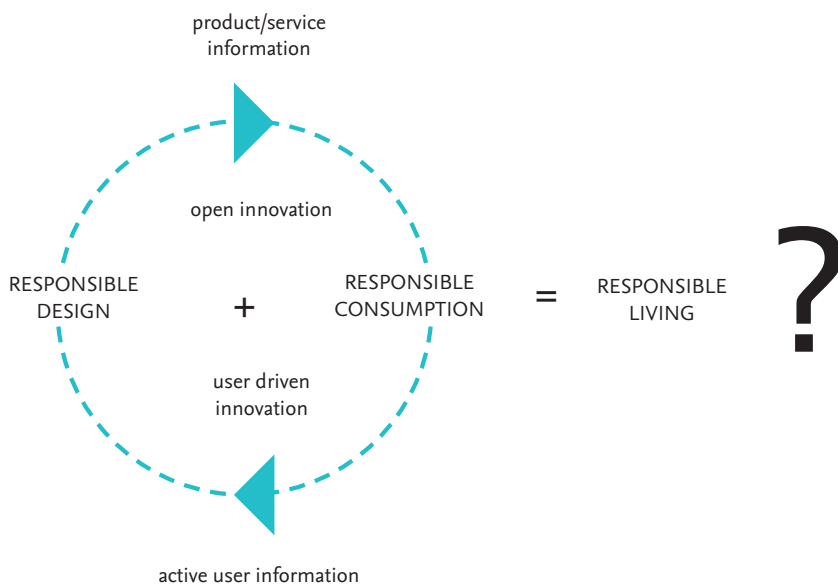
Walton argued in 2005 that this agenda was already underway and it can be further argued that the strictures of recession may well act as a further incentive to such a shift:

The responsible design agenda is growing. There is the need to serve all users, including special constituencies, to preserve resources and the natural environment, and to enhance our communities and the workplace (Walton 2005, n.p).⁴

⁴ Preview to Design Management Review vol. 16, no. 3 2005; special issue on responsible design. Online: http://www.dmi.org/dmi/html/publications/journal/articlelist_d.jsp?itemID=JNL-V16N3

To sum up, figure 8 proposes that new codes of design and consumer responsibility might be established. These are predicated on a form of open innovation that supports accessible transparency, in terms of design information and consumer participation.

FIGURE 8: THE DESIGNER/USER CONTRACT



The ultimate objective is to develop products that address long-term needs and desires and a shared responsibility, which results in long-term fulfilment rather than mere short-term satisfaction. If successful, *responsible living* should be the first step in solving the global problems we are currently recognising but failing to address.

REFERENCES

Davey, Caroline L. et al. (2005): *Design for the Surreal World? A New Model of Socially Responsible Design*. EADo6 – 6th International Conference of the European Academy of Design 29-31 March, University of the Arts, Bremen. Online: <http://ead.verhaag.net/conference/index.html>

Dilnot, Clive (2008): 'The Triumph of Greed. *The New Statesman* 4 December. Online: <http://www.newstatesman.com/ideas/2008/12/greed-economy-crime-essay>

Fitch, Rodney (2009): *Rodney Fitch CBE in Conversation*. 11 May, Cochrane Theatre, London. Online: http://wn.com/CSM_Presents_Rodney_Fitch_CBE_in_conversation

Goleman, Daniel (2009): *Ecological Intelligence: How Knowing the Hidden Impacts of What We Buy Can Change Everything*. New York: Broadway Business.

Taylor, Matthew, participant (2009): *Rodney Fitch CBE in Conversation*. 11 May, Cochrane Theatre, London. Online: http://wn.com/CSM_Presents_Rodney_Fitch_CBE_in_conversation

Walton, Thomas, editor (2005): *Design Management Review* vol. 16, no. 3. Available at: <http://www.dmi.org/dmi/html/publications/journal/pdf/05163WALo6.pdf>

Walton, Thomas (2005): Preview to *Design Management Review* vol. 16, no. 3 2005; special issue on responsible design. Online: http://www.dmi.org/dmi/html/publications/journal/articlelist_d.jsp?itemID=JNL-V16N3



DESIGN RESPONSIBILITY WORKSHOP

The five topics from the tagwall framed an informal workshop. Ahead of the workshop, all participants were given an assignment: "Write five different keywords on five pieces of cardboard." At the workshop each participant could pick any of the submitted keyword cards and use it to go on a short date with another participant to discuss their respective keyword and how they were related. After the date, the now coupled keywords were tagged to one of the topics on the tagwall. After three rounds of dating – the participants formed five discussion groups around each of the tagwall topics.

“ ... the term

definition

has the connotation

of **credibility,**

metaphor

has the connotation

of conviction

and

example

has the connotation

of reality.

For that reason

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metaphors and are supported by plausible

examples from practice.

”

Martina Maria Keitsch

Tracing Ideology in Design texts: An overview

MARTINA MARIA KEITSCH

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INTRODUCTION

In 1979, Nelson Goodman emphasised the significance of metaphors for the process of structuration and interpretation of the human life-world. In Goodman's opinion, metaphors are important elements in the process of knowledge generation "... in replacing some 'stale' natural kinds with novel and illuminating categories, in contriving facts, in revising theory and in bringing us new worlds" (Goodman 1979, 125). The idea that metaphors can be especially fruitful for the development of theories and models has now reached the design community and is today promoted by various authors such as Richard Coyne, Adrian Snodgrass and Leonard J. Waks, who particularly highlight the productive strength of these tropes (see Melles 2000, 92).

The assertion that metaphors affect and inspire human understanding and action applies for definitions too. Definitions, in turn, influence experiences and often greatly shape the way we consider and speak about the world and society. George Orwell illustrates this impressively in his novel *Nineteen Eighty-Four* by introducing *Newspeak*, a gradual imposition of a deliberately primitive mode of communication. The goal of *Newspeak* is to annihilate intelligent (political) discourse, and one linguistic way to do so, is to expand the range of definitions to become as broad and ambiguous as possible. One example for this ambiguity is the term *blackwhite*, which signifies loyalty when addressing a member of the Party, who is will-

ing “to state that black is white for the collective good.” (Stolyarov, 2003, n.p.). In relation to political opponents, however, *blackwhite* means a wrong perception of black as white. Orwell’s *Newspeak* shows how a deliberate subversion of our understanding of the meanings of words can be used ideologically so that: “War is Peace”, “Freedom is Slavery”, “Ignorance is Strength”.¹

While definitions and doctrines are often not easy to distinguish in the political landscape, the first and foremost goal of science² is to clarify terms and use proper definitions.

However, even if scientific theories do not want to manipulate but to dispute, their definitions and metaphors imply various worldviews, it is just that those are rarely exposed and discussed.

From a language philosophy point of view one could also argue that the term *definition* has the connotation of credibility, *metaphor* has the connotation of conviction and *example* has the connotation of reality. For that reason design theory and research texts often seem to be argumentatively clear and reasonable – they use credible definitions, potent metaphors and are supported by plausible examples from practice.

No matter if we chose epistemological or a language philosophy reasoning, it seems worthwhile to take a closer look at how design research texts attempt to influence the reader.

The aim of this paper is thus to shed light on hidden ideologies expressed through language in design texts. The paper consists of five sections. Following the introduction, section two introduces a disciplinary architecture for design in order to locate a position of definitions and metaphors. Section three examines texts from Herbert Simon (pragmatic³ product design), Victor Papanek (social design) and Ezio Manzini (eco-design) related to some examples of *the role, which they ascribe to design and designers* through definitions (i.e. explicit attribution) and metaphors (implicit attribution). Section four shows general tendencies in the texts and discusses advantages and pitfalls. Section five summarises the findings and indicates how insights from tracing ideologies in design texts can be used in curricula.

EXPLANATION OF TERMS:

An *ideology* is understood here as a way of structuring abstract ideas within a certain field based on value judgments and prescriptive doctrines about the meaning and purpose of this field. *Design texts* are understood as written material, and not in Jacques Derrida’s all-encompassing sense: “There is no outside-the-text (“Il n’y a pas de hors-texte”)” (Barry 1995, 70). A *definition* is an identification or description of the essential nature or qualities of something. The term *meta-*

¹ The three slogans at the Ministry of Truth, in: Orwell (1948): 1984, part 1, chapter 1, online <http://www.george-orwell.org/1984/o.html>

² Etymologically *science* comes from: “... *sciens* (gen. *scientis*), prp. of *scire* “to know,” probably originally “to separate one thing from another, to distinguish,” Source: Etymological dictionary, http://www.etymonline.com/index.php?term=science&allowed_in_frame=0. The term *scientific* refers in this article to the natural sciences and the humanities/social sciences.

³ The term *pragmatic* is used to signify concepts that have a *problem-solving* and *iterative solution-making* approach. See also Melles (2008): *New Pragmatism and the Vocabulary and Metaphors of Scholarly Design Research. Design Issues* vol. 24, no. 4, 93.

phor means a comparison between two or more seemingly unrelated subjects, where the first is described as seemingly equal to the second in some ways. Metaphors emerge through an imagination, which connects a denotative (descriptive) meaning and connotative (prescriptive) meaning of terms (e.g. head of the family).

DISCIPLINARY ARCHITECTURE OF DESIGN

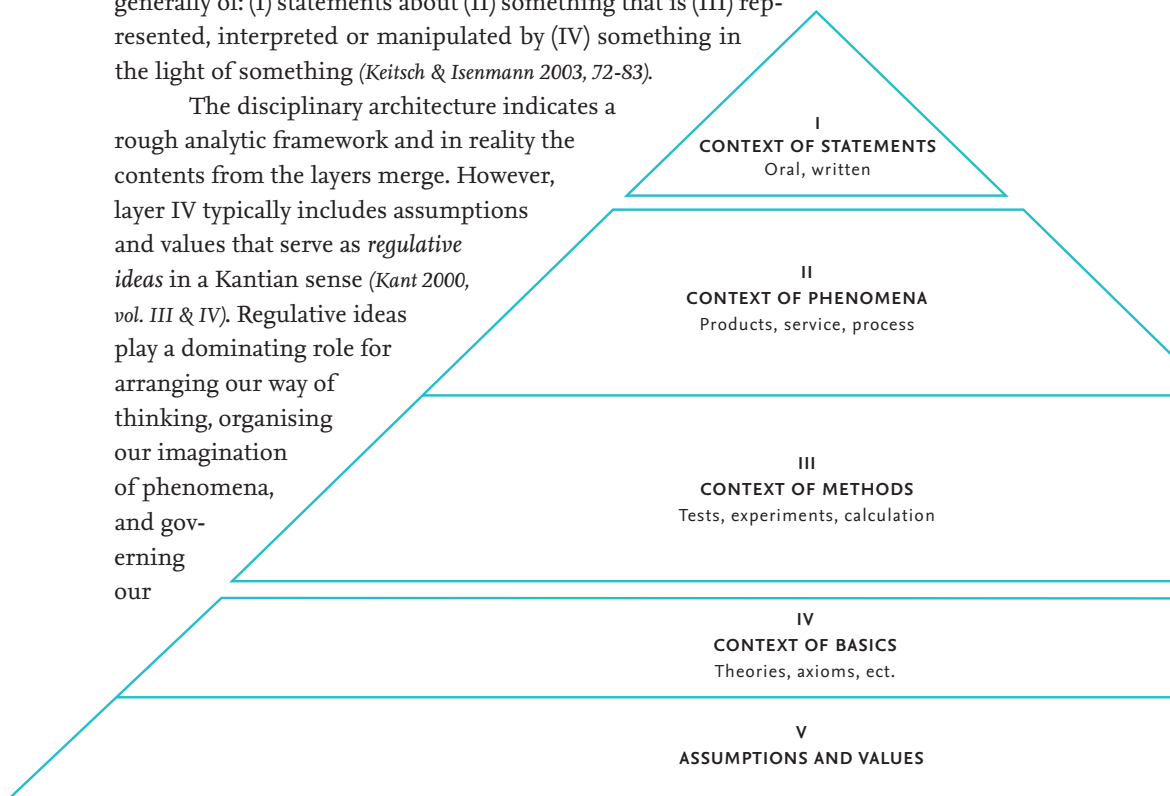
Besides examples and descriptions from design practice, definitions and metaphors contribute to building and structuring the design disciplines, and, within these disciplines, different design fields. Ontologically, definitions and metaphors are conceptual elements, which expose assumptions in texts. Epistemologically, their understanding advance building theories and methods. Practically, they influence design choices (for both designers and users), and set the limits for how and where design is acknowledged. This paper indicates the functions metaphors have in the discussed design texts. The original meaning of the metaphors, their development over time and their *passage* into texts is not taken into account but is certainly an issue that has to be considered for further research.⁴

As the figure shows, a disciplinary architecture consists generally of: (I) statements about (II) something that is (III) represented, interpreted or manipulated by (IV) something in the light of something (*Keitsch & Isenmann 2003, 72-83*).

The disciplinary architecture indicates a rough analytic framework and in reality the contents from the layers merge. However, layer IV typically includes assumptions and values that serve as *regulative ideas* in a Kantian sense (*Kant 2000, vol. III & IV*). Regulative ideas play a dominating role for arranging our way of thinking, organising our imagination of phenomena, and governing our

4 For an interesting discussion about the historical development of a metaphor within different sciences, see Blumenberg (1979): *Schiffbruch mit Zuschauer, Paradigma einer Daseins-metapher*.

Figure:
Disciplinary Architecture:
(I) Texts, articles, curricula, journals, etc. about (II) the design of products, services and processes that are employing (III) tests, experiments, calculations based on (IV) theories, assumptions, and values.



decisionmaking. It is this set of assumptions and values expressed in form of definitions and metaphors that this paper is looking for. Definitions and metaphors are particularly interesting. Usually, the first are explicit statements that express or support an assumption and/or value in a text (layer I). The second are implicit expressions, which *can* counteract the same assumption/value, when used unconsciously. Ambivalences between explicit use of definitions and implicit use of metaphors in design texts have been touched upon elsewhere (Keitsch 2008). This paper, however, will exemplify how definitions and metaphors of design and designers are used in the three fields – pragmatic product design, social design and eco-design – to *manifest* assumptions and values.

DESIGN TEXTS: AN OVERVIEW

Pragmatic product design texts are represented here by Herbert Simon, who worked with human problem solving, based on a cognitive psychologist fundament. Accordingly, Simon defines design as a cognitive process of solving ill-(not healthy)-structured problems:⁵

The current research target is to gain an understanding of problem-solving tasks when the goals themselves are complex and sometimes ill defined, and when the very nature of the problem is successively transformed in the course of exploration. To the extent that a problem has these characteristics, it is usually called ill structured. Because ambiguous goals and shifting problem formulations are typical characteristics of problems of design, the work of architects offers a good example of what is involved in solving ill-structured problems. An architect begins with some very general specifications of what is wanted by a client. The initial goals are modified and substantially elaborated as the architect proceeds with the task. Initial design ideas, recorded in drawings and diagrams, themselves suggest new criteria, new possibilities, and new requirements. Throughout the whole process of design, the emerging conception provides continual feedback that reminds the architect of additional considerations that need to be taken into account (Simon *et al.* 1986, n.p.).

⁵ Design Problem-Solving Process Models are not discussed here. See e.g. Roozenburg & Eekels (1995): *Product design: fundamentals and method.*

The role of the designer is fundamentalised: “Everyone designs who devises a course of action aimed at changing existing situations into preferred ones” (Simon 1996, 111) and instrumentalised: “The engineer, and more generally the designer, is concerned with how things ought to be – how they ought to be in order to attain goals, and to function” (Ibid., 4).

Besides the true belief in human purposive rationality, Simon's definitions reveal some interesting pragmatist perspectives on design and designers. First, it is claimed that design is a matter-of-fact activity, and second, that it is focused on the future. Consequently, designers are future planners who want to achieve a particular outcome. This outcome can be accomplished, if designers gain control of the process of how things work. However, designers should not aim at the stars. Simon presents himself again as pragmatist thinker by introducing the term *satisficing solutions*, explaining that finding the optimal solution could require too many resources or the optimal solution might not even exist: "The time required for a search through a *haystack for a needle* sharp enough to sew with depends on the density of distribution of sharp needles but not on the total size of the stack" (*Ibid.*, 120). Because of time-money constraints, design processes are always concerned with "resource allocation" (*Ibid.*, 124).

Despite his criticism of making too much of a science out of design, Simon often uses metaphors from the natural sciences to describe the cognitive, problem-solving process of design activities: "The peculiar *properties* of the artefact lie on the thin interface between the natural laws within and the natural laws without" (*Ibid.*, 57). In curricula Simon believes that schools can mediate a "...body of intellectually though, analytic, partly formalisable, partly empirical, teachable doctrine about the [design, M.M.K.] process" (*Ibid.*, 113).

In summary, the idea that human behaviour could be studied empirically is prevalent in Simon's texts and goes together with an (explicit) belief in better decision-making through increased knowledge and (implicit) technology determinism:⁶ "There are no morals about technology at all. Technology expands our ways of thinking about things, expands our ways of doing things. If we're bad people we use technology for bad purposes and if we're good people we use it for good purposes" (*Spice 2000*, 10).

The importance of a critical stance towards commercial business imperatives and marketing prescriptions has long been promoted in design texts. One of the most important advocates for this view is Victor Papanek. Papanek's (world)-view is both pessimistic and didactic: "There can be little doubt that the environment and the ecological balance of the planet are no longer sustainable. Unless we learn to preserve and conserve Earth's resources, and change out most basic pattern of consumption, manufacture and recycling, we have no future" (*Papanek 1995*, 17).

Design must be a meaningful activity and a bridge between human needs, culture and ecology, while the social and ecological responsibility of the designer plays an important role:

⁶ Technology determinism is based on at least three presuppositions: First, the assumption of a genuine division between what is technical and what is social, between machine and organisation. Second, that technology has developed independently from society in terms of being self-driven and depending on its own premises. In this view, new technology is a logic product of technological conditions only. Third, that technology is a kind of independent variable for the evolution of society, based on simple cause-effect conditions. See also: Opoku & Keitsch (2006): *Une approche objective de la durabilité? Théorie des implications scientifiques et politiques de l'écologie industrielle, Ecologie et Politique* no. 32, 141-152.

There are professions more harmful than industrial design, but only a very few... by creating whole new species of permanent garbage to clutter up the landscape, and by choosing materials and processes that pollute the air we breathe, designers have become a dangerous breed... In this age of mass production when everything must be planned and designed, design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself). This demands high social and moral responsibility from the designer (Papanek 1997, ix).

One question, the designer has to ask in this context, is: “Am I on the side of social good, or will the object that I design, be an addition to the catalogue of unnecessary fetish objects?” (*Ibid.*). In Papanek’s opinion, a lot of designers are preoccupied with aesthetics, while it is more important to focus on producing products with *real* benefits for people, and by doing so contribute to the communal and moral needs of society. “As a politically disinterested but morally motivated animal, the designer should not be a... pimp for the excesses of big business interests” (*Ibid.*, 327).

Papanek ascribes designers the role as some kind of saviours of humanity. He claims that in order to understand the moral, political and social obligations of such a task, design education should not only ground on learning skills, nourishing talents, understanding the concepts and theories that inform the field, but has to build on philosophical fundamentals in a way that makes values and ethics intrinsic to design methods. The entanglement of descriptive and normative elements in Papanek’s writing displays a common feature of many *ethical* motivated design texts, where authors seem to believe that individual enthusiasm and moral ambitions are convincing enough to make an argument and do not bother to clarify their terms and systematise their statements.

Papanek’s metaphors often refer to the living being and the life-world. The programmatic title, *Design for the real world* (first published 1971), presupposes e.g. a sort of genuine reality that, in turn, implies that there is a world, which is not real (...and which we should not design for?).⁷ The title of his 1995 publication, *The Green Imperative: Ecology and Ethics in design and architecture*, suggests that the ecological environment is a particular area that forces the designer to take a moral standing point. Surprisingly, Papanek uses sexual metaphors as to connote negative sides of the consumption society such as the *honest whore*, *pimp* and *fetish*. On the other

⁷ This naïve perception does not even think of *heterotopias* as possibility for choices. See: Foucault (1984): *Of Other Spaces* (1967), *Heterotopias*, online: <http://foucault.info/documents/heteroTopia/foucault.heteroTopia.en.html>.

hand, considering the protestant fear of the natural in form of sexuality, these metaphors seem to have a strong and quasi-religious effect on disciples: “He leads us away from ‘fetish’ objects for a wasteful society”.⁸

Nature connotations such as *harmony, balance, healing* are used to describe positive processes. In some sections Papanek presents *the consumer* with a prevailing materialistic attitude – in the “...greedy rush for more and more material goods in the West... we are losing love and affection and respect for each other...” and “... convenience is the new buzzword... to help to sell more goods to a jaded public” (Papanek 1995, 12 & 160). The counter picture is the wisdom and knowledge of the indigenous unspoiled natives, here Balinese people: “We have no art, we just do the best we can” (*Ibid.*, 12).

Papanek’s language exemplifies romanticism and rationality criticism, and his texts are declaration of principles rather than arguments and theories. The most obvious messages are that *all men are designers* and that designers should learn from people, who are more capable in solving their own design problems.

The concept of design for sustainability first emerged in the 1960s when authors such as Papanek, Guy Bonsiepe, Ernst F. Schumacher and Ezio Manzini began to criticise modern and unsustainable product development and suggest alternatives. Manzini’s (optimist) belief is focused on foresight, creativity and interaction: “Indeed, we cannot act in a forward looking way if we are unable to imagine a state in which we could potentially live in a different and more attractive way than now” (Manzini & Jégou 2003, 13).

Epistemologically, Manzini combines a natural science and engineering oriented approach with a social science and political oriented approach. His 2006 article, *Design, ethics and sustainability: Guidelines for a transition phase*, gives a definition on design from the International Council of Societies of Industrial Design (ICSID): “Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life-cycles (ICSID 2005). A creative activity that is also the reflective one of choosing between different possibilities” (Manzini 2006, 9). In the same article, he continues on the position of designers who plays an important role in society, here as operators:

Conceiving and proposing products, services and lifestyles, designers play an important role and consequently have an equally important responsibility in generating social expectations in terms of wellbeing..

8 Announcement of Big Ben Bookshop, Prague for the second edition of Papanek’s book: *Design for the Real World* (<http://www.bigbenbookshop.com/index.php?str=nonfiction>), retrieved from a former announcement of the book’s publishers Thames and Hudson (link broken: <http://www.thamesandhudson.com/en/1/9780500273586.mxs>).

Of course designers have no means of imposing, for good or bad, their point of view on others. But they do have the tools to operate on the quality of things, and their acceptability, and therefore on the attraction of the scenarios of wellbeing they help to generate (*Ibid.*, 2, also Papanek & Jégou 2003, 232ff).

Furthermore, Manzini presents practical guidelines in form of two fundamental principles for designers: Low material-energy intensity and High regenerative potential. These principles are very much in line with the eco-technical part of sustainable development (as is the life cycle concept⁹). However, he connects these principles with personal and social *wellbeing*: “The concept of wellbeing is the most basic set of visions and ideas that legitimate socially and ethically the same existence of the production and consumption system” (*Manzini* 2003, 1). Building scenarios for sustainable wellbeing is (again) a social task for designers: “Goal: we have to conceive scenarios of wellbeing in which the overall quality of the context of life has to be considered, in which the physical and social common goods are regenerated and where contemplative time has its place” (*Ibid.*, 7).

Manzini’s metaphorical language varies between eco-aesthetic terminology such as *systems thinking*, *network*, *connectivity*, *system’s creativity*, *autopoiesis*, *symbiotic nature*, etc., and artistic language exemplified in terms such as *playful*, *dreamy*, *colourful*, *attractive*, etc.:¹⁰

“... these phenomena [creative communities, M.M.K.], small and weak as they seem, represent the seed of a plant that if properly cultivated, could grow and prosper. Obviously, we cannot know if this will really happen and that the seeds will find the ground and proper nutriment for growth, but we do know that their future also depends on us” (*Manzini* 2005, n.p.).

This notion is cultivated even more explicitly by introducing a garden metaphor:

To think of objects not as instruments for our use, but as entities that are effectively linked and that need care – to think of objects as plants in our garden... Think of objects that are beautiful and useful as trees in your own garden, objects that endure and have lives of their own, objects that perform services and require care... I am thinking of criteria of quality that leads to a system of objects that have the variety, complexity, life and blend of beauty and utility of a garden but, at the same time, are a product of the real world, a world extensively and intensively artificial (*Manzini & Jégou* 2003, 39).

9 DFE – Design for environment, a technological approach to sustainable development, has a one goal: to optimise material and energy use throughout the entire life cycle of a product i.e. extraction-consumption recycling phase.

10 Manzini & Jégou (2003): *Sustainable Everyday*, 73. See also John Thackara’s 2002 interview with Manzini, “Space and pace of flows” from *Doors of perception* 7: Flow, 14-16 November, Amsterdam, online: http://flow.doorsof-perception.com/content/manzini_trans.html.

The metaphors function to describe a globalised, exciting, however, ecologically and socially correct, society, whose individuals are presented as rather homogenous beings. Manzini is theoretically a social constructivist: “The idea of well-being is a social construct” (Manzini & Jégou 2003, 39) and believes in the idea of social learning processes that involve everybody. Connecting these ideas with the concept of sustainability means “learning to live better leaving a light ecological footprint” (Manzini 2005, n.p.), and Manzini seems to be convinced that his idea of well-being will contribute to sustainable lifestyles: “We need to re-discover the pleasure of moving on foot, of eating local fruit, of feeling the cycle of the seasons, of caring for things and places, of chatting with neighbours, of taking an active part in the life of the neighbourhood, of gazing at the sunset...” (*ibid.*).

GENERAL TENDENCIES IN THE TEXTS

Pragmatic design theory texts see the design process as phases or segments related to activities and outcomes. Starting with some kind of problem identification, the majority of these texts, as exemplified through Simon, aims to develop ideas or concepts and then chose one or two possibilities for realisation considering different trade-off options.

On the minus side, such rationalist approaches can be criticised for being too positivistic, giving too little room for creativity, and for not considering idiosyncrasies in design with their generic, cook bookish principles. Furthermore, complex problems, involving different actors and disciplines are not likely to be solved by a problem-solution focus as e.g. Donald A. Schön points out. For Schön the framing of problems often depends on metaphors underlying the stories for problem setting and problem solving. In the 1979 article *Generative metaphor: A perspective on problem-solving in social policy* (Schön, 1979) he uses an example of seeing a troubled inner-city neighbourhood as urban *blight* (plant infection by germs) and, hence, taking steps rooted in the idea of disease. Thereby, Schön illustrates that a conflict without ends cannot be solved by the use of techniques solely derived from rationalist approaches.

On the plus side, purpose-rational oriented concepts can provide guidelines for novice designers to decompose problems, and to train and improve their decision-making abilities in a relatively safe methodological environment. Additionally, in some contexts *natural science* arguments, metaphors and methods are more convincing than creative reasoning and have a higher status of credibility.

Regarding social, environmental and ethical oriented design theories, a critical stance towards commercial (and perhaps mostly marketing) interests prevails today within the design community. Especially in humanitarian design, responsibilities to the environment and society are taken methodologically into consideration in product development processes, whilst the reasoning for using these *tools* is still feeble.

For example, the British based Design against Crime project (DAC),¹¹ which has the goal to improve design's effectiveness for creating a safer environment and promoting social inclusion focuses on activities rather than consistent arguments.

¹¹ For information on Design against Crime go to: <http://extra.shu.ac.uk/dac/about.html>.

This means that one can find moral standpoints and values rather than scientific vigour in such concepts. However, projects resulting from these theories are often successful, being less paternalistic than former manifestos and grounded on an aesthetic rather than on missionary values as the statement below expresses:

The philosophy behind DAC as a practice based design research agenda is linked to the understanding that design should address security issues without compromising functionality, aesthetics or other forms of performance, i.e. the simple idea that "secure design doesn't have to look criminal or ugly (*University of Arts, London, UK Centre for Design Against Crime*, <http://www.arts.ac.uk/research/researchenvironment/centres/centrefordesignagainstcrime/>).

DAC can be considered as socially responsible design, defined as "design which takes as its primary driver *social issues*, its main consideration *social impact*, and its main objective *social change*" (*Gamman and Thorpe 2009, 408*).

Manzini's two principles are the epitome of good design for sustainability solutions – making convenient material and energy saving products. Other positive tendencies that Manzini's work explicates are the design focus on new paradigms such as service systems and a strong user involvement in local and everyday-life solutions. The methodological problem with the latter is, however, that user involvement on an egalitarian basis is often time and resource consuming, and choices seldom can be justified in a scientific way.

CONCLUSION

According Roland Barthes,¹² every author is influenced by ideological ideas; these are beliefs and representations that sustain and legitimate current power relationships. Ideology promotes assumptions, values and interests of dominant people or groups (also within

¹² Exemplified e.g. in Barthes (1972): *Mythologies*, 74-77.

an academic discipline). The discussed design texts reveal central rational, moral and socio-political ideologies about design and the designers' role. In addition to obvious statements metaphors provide a specific form of indoctrination, which can be more powerful than direct arguments, but which appears sometimes also counter-intuitive to the values that should be expressed.

In terms of design curricula, for beginners definitions and metaphors can provide good ways to structure thinking and understand abstractions. In the medium phase, making students aware of ideological terms in design literature might strengthen their analytical abilities and argumentation skills. For advanced students – understanding metaphors trains their attention towards what is *taken-for-granted*, and is rather related to creative than cognitive activity. In summary, comprehensive text analyses in design curricula contributes to learning more about the intricate relationship between design language and the language of design and helps to understand that there can never be a complete description of *the meaning of design*. Such analyses could be included in design curricula with the goal to learn to understand and build explanations, arguments and metaphors. For design texts and the development of the design disciplines this seems as important to me as the increased consideration of case studies and users *behaviours*,

REFERENCES

- Barry, Peter (1995, 1st ed.):** *Beginning Theory: An introduction to literary and cultural theory*. Manchester: Manchester University Press.
- Barthes, Roland (1972):** *Mythologies*. New York: Hill and Wang.
- Blumenberg, Hans (1979):** *Schiffbruch mit Zuschauer, Paradigma einer Daseinsmetapher*. Frankfurt am Main: Suhrkamp
- Gamman, Lorriane and Thorpe, Adam (2009):** Less Is More: What Design Against Crime Can Contribute To Sustainability. *Built Environment* vol. 35, no. 3, 403-418.
- Goodman, Nelson (1979):** Metaphor as Moonlighting. *Critical Inquiry* vol. 6, no. 1 (Autumn), 125-130.
- Kant, Immanuel (2000 [1787 B 699], 14th ed.):** *Kritik der reinen Vernunft* (1 und 2) [Critique of pure reason]. In Wilhelm Weischedel (ed.): *Werkausgabe in 12 Bänden*, Band III und Band IV. Frankfurt am Main: Suhrkamp.
- Keitsch, Martina (2008).** Metaphors in design research. *Paradoxes within Design Research – Mechanisms and Contradictions*, the 7th NORDCODE Seminar & Workshop, May 28-30 2, Lund University, Sweden.
- Keitsch, Martina & Ralf Isenmann (2003):** Industrial Ecology: A philosophically focused appraisal. *Business Strategy and the Environment Conference*, 15-16 September, Stamford Hall, University of Leicester, UK, 72-84.
- Manzini, Ezio (2006):** Design, ethics and sustainability, Guidelines for a transition phase. *Cumulus Working Papers* Nantes 16/06, 9-15. Online: http://www.cumulusassociation.org/images/stories/Working_papers/WP_Nantes_16_06.pdf, 9-15.
- Manzini, Ezio (2005):** Enabling Platforms for Creative Communities. *Doors of Perception* 8, March 21-26, New Dehli. Online: <http://doors8delhi.doorsofperception.com/presentationpdf/manzini.html>.
- Manzini, Ezio (2003):** Scenarios of sustainable well-being. *Design Philosophy Papers* issue 1, 13 pages. Online: <http://www.changedesign.org/Resources/Manzini/Manuscripts/ManziniScenarios.pdf>.
- Manzini, Ezio & François Jégou (2003):** *Sustainable Everyday: Scenarios of Urban Life*. Milan: Ambiente.
- Melles, Gavin (2008):** New Pragmatism and the Vocabulary and Metaphors of Scholarly Design Research. *Design Issues* vol. 24, no. 4 (Autumn), 88-101.

Opoku, Hilde N. & Martina Maria Keitsch (2006): Une approche objective de la durabilité? Théorie des implications scientifiques et politiques de l'écologie industrielle. *Ecologie et Politique* no. 32, 141-152.

Orwell, George (1948): 1984 (Part 1, chapter 1). Online: <http://www.george-orwell.org/1984/o.html>.

Papanek, Victor (1997 (1971) 2nd ed.): *Design for the Real World: Human Ecology and Social Change*. London: Thames and Hudson.

Papanek, Victor (1995): *The Green Imperative: Ecology and Ethics in Design and Architecture*. London: Thames and Hudson.

Roozenburg, Norbert F. M. & Johannes Eekels (1995): *Product design: Fundamentals and method*. Chichester, NY: Wiley.

Schön, Donald A. (1979): Generative metaphor: A perspective on problem-solving in social policy. In Andrew Ortony (ed.): *Metaphor and Thought*. New York: Cambridge University Press, 284-324.

Simon, Herbert A. et al (1986): Decision Making and Problem Solving (reprinted with permission of Research Briefings, National Academy of Sciences, National Academy Press, Washington, DC). Online: <http://dieoff.org/page163.htm>.

Simon, Herbert A. (1996 (1969), 3rd edition): *The science of the artificial*. Cambridge, MA: MIT Press.

Spice, Byron (2000): Computers: Lots to think about (interview with Herbert Simon). *Pittsburg Gazette* Oct 16, p. 10. Online: <http://news.google.com/news/papers?nid=1129&dat=20001016&id=e4VIAAAAIBAJ&sjid=c28DAAAIBA&pg=4242,5000677>.

Stolyarov, Gennady, II (2003): Orwell's Warning: Newspeak. *The Rational Argumentator, A Journal for Western Man*, issue XII (April) Online: http://rationalargumentator.com/Orwells_Warning6.html.

Thackara, John (2002): Space and pace of flows (interview with Ezio Manzini). *Doors of perception 7: Flow*, 14-16 November, Amsterdam. Online: http://flow.doorsofperception.com/content/manzini_trans.html.

IDEOLOGY AND DESIGN

IDENTITY

CHOICE

SUN GLASSES DESIGN

USEABLE RESEARCH

And IDEAL
IRRESPONSIBILITY

respect

MORAL

VALUES

INTERDISCIPLINARITY

SUSTAINING SOCIETY

(HISTORY

MESSAGE IN BRANDING

IDEOLOGY AND DESIGN

Ideology and design may seem to be strange bedfellows. What is ideological about a dress, a chair or tablespoon? Historically, however, design has often materialised ideological value, visions and beliefs – be they of a benevolent nature or not. Design can communicate and create meaning. The question is: Where does an ideology start? And what happens, when it becomes commonly accepted?

IDEOLOGY IS WHAT
DECIDES YOUR CHOICES
A PHILOSOPHY OF VALUES

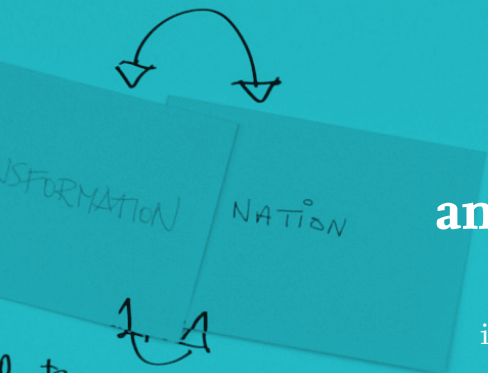
“ The ideology of Danish design
was
its ability

to **definitively**
and **responsibly**
create the foundation
in the home
and public institutions **for**
the good life.

The objective was creating the ideal form,

not renewal
or any
consideration of **being**
just fashionable. ”

Marie Riegels Melchior



1. A
TRANSFORMATION



IDEOLOGY - DESIGN
- MARKETING

WHAT DO WE BUY?
WHY?

STORYTELLING.

WHERE DOES AN IDEOLOGY
START - IS IT AN
UNDERDOG?

WHAT HAPPENS WITH
THE IDEOLOGY WHEN
IT IS COMMONLY
ACCEPTED?

Danish Fashion: A responsible potential or pitfall?

MARIE RIEGELS MELCHIOR

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INTRODUCTION

Over the past 10 to 15 years, Danish fashion has become a success story. Danish fashion in this sense refers to both Danish fashion design and the Danish fashion industry. The success has occurred despite near-death predictions for the industry during the late 1980s when manufacturing of clothing in Denmark was outsourced to low-wage countries in Eastern Europe and Asia. Today, the pride entailed in the concept of Danish fashion is based on a belief in promoting difference through design in an otherwise globalised industry for economic benefit. However, can national branding be considered to be a responsible potential for fashion design? What are the pitfalls? But most importantly, what is Danish fashion?

These questions are the main concern of this paper, which will unfold the construction of Danish fashion as a concept and brand as well as discuss the responsible potential or possible pitfall of specifically branding Danish fashion and furthermore, doing research in an area of a highly contemporary phenomenon.¹

One answer to the questions could be found in the current statistics, figures and numbers of the industry. When looking at these data, one quickly realises that the *Danish fashion industry* does not exist as a statistical category. This is due to the fact that the category of *fashion industry* is not part of the *Standard Industrial Classification*, a classification system with a four-digit code forming the

¹ These questions were originally discussed in the keynote talk at the 8th NORDCODE Seminar & Workshop at the Kolding School of Design, May 27 2009. The paper is based on my 2009 PhD dissertation: *Danish in Fashion! An Exploration of Design, History and Identity in the Danish Fashion Industry*. The PhD project was co-financed by the Danish Design School and the Danish Museum of Art & Design. Some of the points in this paper have been further developed in the paper: *Translating Fashion into Danish*, written together with Associate Professor Fabian Csaba and Associate Professor Lise Skov at the Copenhagen Business School, and presented at the conference *Government Encounters*, May 4-6 2009, at the Copenhagen Business School.

basis for statistical material, which was invented by the United States government in the late 1930s, and which became the model for the organisation Statistics Denmark. Instead, the statistic calculation of the Danish fashion industry is based on the category of *clothing industry*, including the production and trade of uniforms and industrial work-wear.

Today, when speaking of the fashion industry, the term is applied by the industry as being synonymous with the notion of the clothing industry. This means that the fashion industry is estimated to consist of approximately 620 companies registered by Statistics Denmark as *whole sellers of clothing* (Deloitte 2008). Furthermore, the industry employs approximately 11,328 people and in 2008 had an annual turnover of 23.6 billion DKK of which about 90 per cent was gained on export (21.4 billion DKK). The three main export markets of the industry are Germany, Sweden and Norway (DTB 2008, 2-3). On the basis of these figures, the industry is often described as being the fourth largest export industry of the Danish manufacturing industries. The numbers are based on the combination of the export profits of Danish whole sales companies of clothing, textiles and leather goods.² In addition, what characterises the industry is that it is dominated by three companies that account for an estimated 75 per cent of its total export profits. The three companies are Bestseller A/S,³ BTX Group A/S⁴ and IC Companies A/S.⁵ The remaining industry is composed primarily of small-sized companies of approximately four to nine full-time employees, mostly owner-managed.⁶

The companies are customarily defined as either price-driven or design-driven. Companies that compete primarily on price rely heavily on minimising manufacturing and distribution costs; the other type of companies bases their market position mainly on design and branding of goods.

Another way to answer the questions is to follow the construction of Danish fashion and its meaning in a recent historical perspective. Back in 1950s Denmark, the concept of Danish fashion was very vague, if indeed people were even aware of it at all. As an idea it did not make sense, unlike the concept of *Danish design* or *Danish modern* did at the same time, when modern furniture designed and manufactured in Denmark entered international markets (Hansen 2006).

At the time, fashion in a Danish context was widely regarded as a foreign (most often Parisian), elite and female phenomenon. The fashion industry operated through what, in fashion theory, is termed a *monocentric* fashion system (Davis 1992, 201). This did not only influence fashion consumption in Denmark but also the local clothing manufacturing industry. Danish women following the latest fash-

2 Based on 2003 figures, the fashion industry's export profit (e.g. the export of clothing, textile and leather goods) was 30 billion DKK, making it the fourth largest manufacturing export industry next to the medical industry as the third largest (export profit of 32.1 billion DKK), the agricultural industry as the second largest (export profit of 67.9 billion DKK) and the electronic and machine industry as the largest (export profit of 92.1 billion DKK) (FORA 2005,14).

3 Bestseller A/S (estab. 1979) had in 2007 an annual turnover of 10.4 billion DKK and employed in Denmark 2,654 people. The company represents ten different fashion brands for children, women's and men's wear and ran in 2007 1,740 concept stores (www.bestseller.com).

4 BTX Group A/S (estab. 2005 when the capital fund EQT bought the company Brandtex A/S, estab. 1935) had in 2008 an annual turnover of 3.2 billion DKK and employed 1,593 people. The company represents 19 different fashion brands for teenagers, women's and men's wear (www.btx-group.dk).

ion had to keep up with what made the news at the Parisian haute couture fashion houses, such as Dior, Balenciaga, Chanel, Balmain and many other important names of the time. Copenhagen department stores and their special modelling sections (in Danish: *model-salon*) would then, as mediators of the latest fashion, buy patterns and drawings (models) from the haute couture houses for reproduction aimed at their local clientele. The fashion industry of the time was internationally centred in world cities such as Paris, London and New York, and from these centres fashion would spread to their immediate periphery (e.g. Davis 1992; Lipovetsky 1994; Crane 2000).

The Danish fashion consumers and the local clothing industry were, so to speak, at the receiving end of fashion, if fashion-conscious at all. The local industry catered to the home market, and it was common among Danish clothing manufacturers to follow Parisian fashion trends, but not in a systematic way, presenting new collections of style, colour and fabrics every six months. Instead, they produced by demand and focused on making a few kinds of clothing (slacks, blouses, sweaters, women's jackets, etc.) rather than whole outfits for day and evening wear. The definition of Danish fashion did not include the perception of a certain Danish style to the clothes but recognised that the clothes were made in Denmark according to international, fashionable style.

5 IC Companys A/S (estab. 2001 by the merge of the fashion company InWear A/S (estab. 1969) and Carli Gry International A/S (estab. 1973)). The company represents 11 different fashion brands for women's and men's wear. In 2006, the company's annual turnover was 3 billion DKK; it employed 2,200 people and ran 259 concept stores. The company is publicly listed on Copenhagen Stock Exchange (www.iccompanies.dk).

6 According to a 2008 Deloitte report on the Danish fashion industry, 32 per cent of the Danish fashion companies have four to nine full-time employees (Deloitte 2008, 17).

TOWARDS A DANISH FASHION BRAND

By the end of the 1950s, this perception of Danish fashion would, however, slowly begin to change. Debates, though limited, emerged around the potential for the clothing industry to follow the success of Danish furniture design and develop and promote its products as representative of a certain Danish style. This was suggested after the Danish clothing industry slowly started exporting, first and foremost, to its neighbouring Scandinavian countries. It was something the industry perceived to be necessary in order to stay in business due to increasingly open markets by the early 1950s and, as a result, growing imports of foreign manufactured clothing. Consequently, in 1958, the clothing industry started arranging biannual fashion fairs in Copenhagen to attract firstly, the attention of the Danish retailers and secondly, that of foreign buyers.

However, it was the introduction of youth/teenage fashion in the United States and the United Kingdom that would lead to the first definition of Danish fashion. Changes in the international fashion industry by the *youth quake* opened a new market for industrially manufactured fashionable clothing or what is known as *ready to wear*. Teenagers wanted their own clothing style made specifically

to fit them and their lifestyle. Young professionally-trained fashion designers from art schools saw the potential in this movement and began making their own fashion design aimed at their own peers and produced by local clothing manufacturers. In this way, they abandoned the haute couture houses of Paris, the elite and grown-up culture associated with fashion, and made their own fashion statements. In fashion theory, this movement is often referred to as the fashion system's change from *monocentrism* to *polycentrism* (Davis 1992). With this transformation process, new fashion centres emerged, and more than a few dominating styles made fashion. The Danish clothing industry soon became aware of these international trends; when the first *teenage department* opened at Magasin du Nord, the Copenhagen department store, and small teenage fashion boutiques started to open on *Strøget*, the Copenhagen high street (Deres, in 1957, and Nørgaard paa Strøget, in 1958), things began to change. Clothing manufacturers started collaborating with professionally trained Danish fashion designers. What further happened was that, a new kind of fashion company emerged in the Danish industry landscape. This new business model was centred on a fashion designer, who would either sell his/her fashion design to manufacturers, purchase the manufacture of his/her designs or manage his/her own manufacturing facilities. The collaboration between manufacturers and fashion designers impacted the organisation of production going from producing new clothes when the storage was empty to producing whole collections for sale every season – Spring/Summer, Autumn/Winter.

Following these developments, the clothing industry became the promoter of local fashion designers, who in return drew attention to the industry, predominantly in the local press and fashion magazines. The Danish clothing industry no longer wanted to be on the receiving end of fashion – or at least this became the tendency. The new fashion designers of the late 1950s and the 1960s included Søs Drasbæk, Margit Brandt, Mugge Kølpin, Lise-Lotte Wiingaard, Lars Hillingsø, Sysser Ginsborg and Lennart Råholt. They became locally recognised for designing a unique, independent Danish fashion and did not perceive themselves as copiers of trends from abroad, rather as innovators of their own versions in response to the youth culture of their time. This approach to fashion design led to an increasing consensus about the common denominators of Danish fashion: Functional, wearable and not least fashionable. In local and foreign media, it was not uncommon to speak of Danish fashion as *democratic* in opposition to the elite French haute couture fashion. At the same time, however, it was not very clear what this rhetoric

signified. These characteristics resembled the description and perception of *Danish design*; however, the link between the two design areas was not very strong. Ideologically, there was tension between the concepts of *Danish design* and *Danish fashion*. Practitioners of Danish design were for the most part building on a self-perception of being anti-fashion, opposed to the imitation of historic styles, and instead motivated by the intentions of longevity in order to improve life, as in the political aim of the Danish welfare state at the time (Hansen 2006, 106). Danish design was considered responsible and Danish fashion the direct opposite. Furthermore, the ideological discussions within the Danish design field did not have obvious equivalents within the field of fashion design; at least not as far as what has been documented in trade journals, newspapers and magazines. Rather, the discourse in the fashion design field was centred around the ethics of earning what were considered to be large profits on clothing, which was generally regarded as a human necessity and not just a consumer good in the early 1970s (Ellemann-Jensen 1971).

CHALLENGES

With the economic crisis of the early 1970s, Denmark entering the European Common Market in 1973, and the increasing imports of low-cost foreign goods, the 1970s and 1980s represented a struggle for survival of the local clothing manufacturers who still dominated the industry. Even the Multi Fiber Agreement, the international quota system (1974-2005) that regulated imports of textile and clothing from non-European countries to the European Common Market and the United States (Hilger 2008, 9), only temporarily improved the situation for the manufacturers before speeding up the process of outsourcing the manual production of clothing to low-wage countries. The development toward low-cost outsourcing slowly took off in the 1970s and increased, until almost all production had moved abroad by the late 1990s. For local manufacturers, the idea of going back to being fashion followers like in the pre-1960s was not an option either. Consequently, those manufacturers who failed to establish and move production to low-cost countries and adapt their businesses to the new globalised market conditions went out of business. By the early 1990s, the Danish clothing industry was struggling to an extent that newspaper headlines declared the demise of the industry; meanwhile, the concept of Danish fashion was struggling as well. Even though fashion designers had become an integral part of the industry, many companies decided to follow trends rather than initiate them and thus focused on being price competitive in

order to continue manufacturing in Denmark. The perception of Danish fashion as being unique lost its lustre. Instead, in the public discourse, Danish fashion was perceived as *trend following* or, in negative terms, as *copy-fashion* (Melchior 2008).

NEW OPPORTUNITIES IN THE GLOBAL FASHION INDUSTRY

This image would, however, change, with the collective transformation of the Danish fashion industry from one that was manufacturing-based to one that was design-based, creative industry during the mid-1990s and the following years. Clothing manufacturing left the country and instead, the industry became dominated by whole sellers of clothing, or what in the terminology of the industry have been referred to as *concept houses*: Designing, marketing, distributing, and retailing fashionable clothes. Today, this is characteristic of the companies of the Danish fashion industry from large to small. What further differentiates them is the extent to which these concept houses are based on a concept of an individual head fashion designer of the company or on a more anonymous design defined by the segment focus of the company brand(s).

It is also important to realise the impact of the new global supply chain within the fashion industry in order to understand the new meanings to Danish fashion that emerged during this time. The increasing liberation of the quota system on fibre trade made it increasingly common to produce clothes outside Europe – in places like India, Bangladesh, the Philippines, and China. This led to cost reductions in the manufacturing processes, but also paved the way for new stylistic possibilities. As a result, ethnic bohemian styles based especially on Indian embroidery techniques and colour schemes became fashionable and seen as being stylistically significant to Danish fashion in the late 1990s and early 2000s. Fashion brands such as Munthe plus Simonsen, Bruuns Bazaar, and DAY Birger et Mikkelsen were the trendsetters of this development. Ethnic bohemian as the common denominator for Danish fashion was further followed by a general perception of Danish fashion as being democratic due to its placement within the mid-price segment of the general industry. This can be seen as the only link to the previous pride in Danish fashion of the 1960s. Otherwise, perceiving Danish fashion as a new phenomenon was central in distancing the concept of Danish fashion from its previous, less attractive perception as copy-fashion.

With the return of a positive perception of Danish fashion, a new institutionalisation of the industry emerged, most significantly in the establishment of the Danish Fashion Institute network organ-

[Illustration 1:
DAY Birger et Mikkelsen
flagship store in the
centre of Copenhagen.
The clothing and
interior is essential
bohemian with many
details from India.
(Photo: Marie Riegels
Melchior, 2006)]

[Illustration 2:
Bruuns Bazaar
Spring/Summer 2007.
(Photo: Marie Riegels
Melchior, 2006)]

[Illustration 3:
Munthe plus Simonsen
Spring/Summer 2007,
demonstrating bohemian
Danish fashion (Photo: Marie
Riegels Melchior, 2006)]



isation in 2005. The Danish Fashion Institute came into existence due to support from both the new business policy of the Danish government highlighting creative industries and from, predominantly, the design-driven smaller fashion companies, who found the need for more coordination within the industry and its branding. One of the first initiatives by the Danish Fashion Institute was, besides branding and coordinating *Copenhagen Fashion Week*, to identify the *DNA of Danish fashion*. There was an interest in finding the essence of the qualities of Danish fashion, just as it has continuously been the interest for design scholars and designers/architects to write about *Danish design* (Hansen 2006; Dickson 2006). This was further supported by a government report, suggesting a future potential for the Danish fashion industry, and that Denmark became the fifth global fashion centre, by marketing its specificity and the significance of its being Danish (FORA 2005). In this respect, *Danishness* also became the common denominator of Danish fashion and was viewed as a competitive asset with economic potential. Yet again, as in the 1960s, it was difficult to further identify the significance of what this meant. Danish fashion was recognised as being something specific, but due to the various fashion designs represented by the different fashion companies, it was difficult to identify a unifying stylistic factor across the industry. It was no longer possible to identify Danish fashion as being *Made in Denmark*. What was claimed to be Danish was the origin of the design. However, such a claim raises the question of whether this accounts for the fashion designer being born in Denmark, being a Danish citizen or not. In addition, we may ask, how one can evaluate whether design has a national origin? What is national design in the first place? In cultural history and design research it has, since the *cultural turn*, been accepted that the matter of national identity is a social construct (e.g. Löfgren 1989; Stoklund 1999). In the case of Danish fashion, the challenge seemed to be how to make this construct work!

The challenge has led the Danish Fashion Institute to different initiatives. First, as already mentioned, an effort was made to identify the DNA of Danish fashion, which resulted in the report *Dansk mode. Historie, design, identitet* (in English, *Danish Fashion. History, design identity*; Schødt Rasmussen 2006). Secondly, a Nordic initiative was launched in the summer of 2008 under the title *NICE – Nordic Clean and Ethical*. The objective of the initiative was to “lead the Nordic fashion industry towards a stronger focus on responsible, ethical and sustainable production”. Responsibility, ethics and sustainability are wanted to be integral parts of the content of Danish fashion as well as fashion from the other Nordic countries. So far the initiative has resulted in the launch of a Nordic Fashion Code of Conduct

and a 10-year plan of action in autumn 2009. It is difficult not to agree with such an initiative. However, it follows general tendencies among other Western fashion industries. Therefore, one could claim it has less significance in distinguishing Danish fashion in any particular way. Instead, it is a matter of brand extension – how Danish fashion is associated with other images of Denmark, the Danish fashion industry and fashion design. This is currently the challenge for the industry to identify.

FASHION-NATION: AN INTERNATIONAL ATTRACTION

The Danish case of the construction of Danish fashion is far from an exclusive story. It has its counterparts in Scandinavia, Europe, Asia and even Africa. Around the world and across previous East-West divides of the fashion industry, local fashion industries and governments have an interest in constructing their own national fashion design identity, as the Dutch fashion researcher José Teunissen has stated in the book *Global Fashion, Local Tradition* (2005). And, in relation to the global development of beauty contests, there seems to be a “global system of common difference”, as the American anthropologist, Richard Wilk has coined it (Wilk 1995, 111). Overall, globalisation and the globalisation of the fashion industry have inspired a belief in the branding of the local for global potential. Specificity has become a value for niche markets. A few examples of the potential have further stimulated this development, such as the success of Antwerp-based fashion designers putting Belgium on the global fashion map since the late 1980s (Debo 2007), and the earlier ability of Japanese fashion designers to enter the fashion stage of Paris and coincidentally promote Japanese fashion and Tokyo as a global fashion centre along fashion centres such as Paris, London, New York and Milan (Skov 2003; Kawamura 2004).

Within fashion research and associated academic fields, the past ten years of research publications have likewise demonstrated a growing interest in representing or even rewriting local fashion traditions and histories. Publications focusing on the nation, national identity, fashion and globalisation have not been uncommon, including Nicola White’s book *Reconstructing Italian Fashion* (2000), and Alison Goodrum’s *The National Fabric. Fashion Britishness, Globalization* (2005), to mention a few. These publications can be seen as promoting the idea of a local/national fashion tradition and stimulating the myth of specific fashion design traditions due to their rather descriptive but uncritical approach.

NATION BRANDING: WHAT KIND OF STRATEGY?

The British brand expert Simon Anholt declared in an article in the *Journal of Brand Management* that brands of companies from a country with a strong international brand image did better in polls than brands of less well-known countries (Anholt 1998). The association between commercial and national brand has the potential for a positive outcome. Italy, for example, is famous for producing pasta and pizza, so Italian pasta and pizza brands enjoy more immediate and positive associations by the consumers than non-Italian brands. The French are renowned for their skill in perfumery, so it is natural that French perfume brands play on their French heritage, Anholt states (Anholt 1998, 396).

In relation to the fashion industry, the brand of France as the historic home country of luxury since the seventeenth century (Louis XIV/the Sun King) still gives leverage to French fashion brands. However, the tendency described above indicates that the association between commercial and national brands can also work in the opposite direction; in more popular terms, the famous quote from John F. Kennedy's inauguration speech in 1961 seems appropriate in this context: "Ask not what your country can do for you; ask what you can do for your country." The current question seems to be what fashion design and the local fashion industry can do for its country of origin.

Nation branding of a local fashion industry is not just a pragmatic act by the fashion industry describing its country of origin. It is naive to think so. Nation branding local fashion industries has a strategic purpose, which is further supported by the engagement of local government in industry politics. This has been the case since 2005, supported by the Danish liberal-conservative government then in power. This is not to say that the fashion industry has not been subject to industry policies before – it has. What is new is the government's interest in specific industry. As part of the government's merged cultural and business policy stressed through terms such as the *experience economy* and *creative industries*, the fashion industry has been highlighted as a key example of a creative industry that has managed to transform from a Fordist manufacturing industry to a post-Fordist globalised industry that is locally based on skills of design (creativity and innovation) and business management. This focus was part of the government's globalisation policy, where the main purpose was to find new strategic business areas for the de-industrialised country from which to profit, and to reposition the country's brand image as an attractive nation for tourism, investment and highly skilled knowledge workers. The Danish fashion industry has an attractive potential in this regard. Statistically – even though

it may be debated how representative the numbers actually are of the industry in its current form – the Danish fashion industry is a success in the sense that, compared to other Danish manufacturing industries, it is the country's fourth largest exporting industry. For branding the nation, the Danish fashion industry and the concept of Danish fashion deliver brand extension to the nation by being modern, forward thinking and globalised. Furthermore, the fashion industry gives politicians a platform for local exposure, specifically during the biannual Copenhagen Fashion Week in early February and August, in which they can attend catwalk shows and fashion fairs and perform as trend and fashion interested modern cosmopolites. Even the former Danish prime minister, Anders Fogh Rasmussen, who from 2001 to 2009 headed the liberal-conservative merger of cultural and business policy, stated in the March 2009 issue of the international lifestyle and business magazine *Monocle* that he sees three important images of Denmark: "First, Denmark as a creative nation: the nation of design, fashion, architecture, modern furniture, etc. Secondly, Denmark as a green nation. And thirdly, ...Denmark as a life-quality nation" (*Brülé* 2009:48).

[Illustration 4: Copenhagen Fashion Week at Copenhagen City Hall turning the city into a fashion capital, August 2006 (photo: Marie Riegels Melchior, 2006)]



WHO IS RESPONSIBLE AND FOR WHAT?

The situation outlined above may give rise to the question of responsibility. Is it indeed responsible to brand the fashion industry in Denmark as *Danish fashion* – committing oneself to one national brand, creating products loaded with specific nationality and loyalty to the nation in all of its interactions as an otherwise global industry? So far, this question has been put forward neither by the Danish Fashion Institute nor the industry's trade organisation, Dansk Fashion & Textile.

However, among the fashion companies there is still reluctance to market directly their fashion products as being Danish by applying sewn-in labels stating *Design in Denmark*. According to Dansk Fashion & Textile, this reluctance is rooted in the manufacturing history of the industry, where *Made in Denmark* was the prime label to defend. However, since autumn of 2007, Dansk Fashion & Textile has officially declared that consumers are no longer confused by the labels *Made in Denmark* and *Design in Denmark*. They understand the difference. It is therefore up to the individual company whether they want to use this kind of labelling as Danish marketing law does not regulate the area. In that sense, the situation in Denmark differs from our neighbouring Scandinavian country Sweden, where *Design in Sweden* has become a common and widely used trademark within the fashion industry as well as other consumer goods industries. Why the difference will need a comparative study on this subject to be conducted. This is an obvious candidate for future research.

But it is worth pointing out here the experiences gained in the Danish furniture industry and its mid-twentieth century success of branding Danish design internationally. Since the 1980s, this strategy has been criticised for limiting the potential for new directions in Danish furniture design. Often, the concept of Danish design is referred to as an old chair meaning, it is a concept stuck in history. The challenge is to renew such a successful brand, yet renewal was not what modern Danish design was aiming at in the 1950s. The ideology of Danish design was its ability to definitively and responsibly create the foundation in the home and public institutions for the good life. The objective was creating the ideal form, not renewal or any consideration of being *just* fashionable.

One has to further ask: Have we learned a lesson from branding Danish design? According to the business historian Per H. Hansen, it worked at first but was neither sustainable in the long run, nor beneficial for the new talents emerging (Hansen 2006). One must also ask what responsibility nation branding places on the Danish fashion industry. When the nation and the fashion industry are associated through their brands, both can positively extend each other's image, as Anholt points out, but at the same time, it is also possible for the extension to have a negative impact. Consider, for example, the risk of underage child labour in the fashion industry, when manufacturing is outsourced to low wage countries, and it becomes impossible for the fashion company to control who is producing what in the global supply chain. The scenario is also possible

in reverse: The image of Denmark is internationally under attack as during the so-called “cartoon crisis” in 2006. Exporting consumer goods to the Middle East from Denmark was a challenge if not completely impossible.

Finally, we may ask whether a nation brand even matters at all. Denmark has neither a strong and significant tradition for fashion design nor specific dress traditions. Outside of Denmark, there is no expectation of a certain Danish fashion! Why try to build a Danish fashion brand? Will it lead to export growth? It is particularly important to take into account that the majority of the fashion industry’s export is produced by a few fashion companies that are price-driven rather than design-driven. For them, the concept of Danish fashion has limited significance for their sales. Is this brand building, then, only of value internally? Valuable for strengthening the self-consciousness of the fashion industry in Denmark and for national politics in order to build a new internal understanding of Denmark as a modern, forward moving, post-industrial nation? Altogether, these questions yet remain to be answered, but hopefully they create room for further reflection among scholars and practitioners within the Danish fashion industry.

CONCLUDING REMARKS

Danish fashion: Responsible potential or possible pitfall? It is a difficult question to answer. It is a politicised question and inevitably the answer will be as well. It has at least the potential for internal and renewed nation building in the age of globalisation. Its external potential might easily be a pitfall, short-lived, in and out of fashion, and therefore of less significant value as long as the Danish fashion companies do not play an active role in defining Danish fashion, as the Danish furniture designers and architects did in the 1950s in what was the heyday of Danish design. In other words, branding Danish fashion needs to be based on a fundamental content and the current content-based understanding of Danish fashion is not really there. With the current academic development of fashion design education, there is a potential future for stronger responsibility towards the concept and brand of Danish fashion. But for now, we have to wait and see.

REFERENCES

- Anholt, Simon (1998):** Nation-Brands of the twenty-first century. *The Journal of Brand Management* vol. 5, no. 6, 395-406.
- Brùlè, Tyler (2009):** Premier League – Copenhagen. *Monocle* vol. 03, issue. 21 (March), 47-49.
- Clifford, James & George E. Marcus (eds., 1986):** *Writing culture: the poetics and politics of ethnography*. Berkeley: University of California Press.
- Crane, Diana (2000):** *Fashion and Its Social Agendas: Class, Gender and Identity in Clothing*. Chicago: University of Chicago Press.
- Davis, Fred (1992):** *Fashion, Culture and Identity*. Chicago: The University of Chicago Press.
- Deloitte (2008):** *Analyse af beklædningsbranchen – tendenser og udfordringer*. Copenhagen: Deloitte.
- Dickson, Thomas (2006):** *Dansk design*. København: Gyldendal.
- DTB (2008):** *Årsberetning 2007*. Herning: Dansk Textil & Beklædning.
- Ellemann-Jensen, Uffe (1971):** *De nye millionærer*. København: Forum.
- FORA (2005):** *Brugerdreven innovation i dansk mode – den 5. globale modeklynge*. København: Økonomi- & Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Hansen, Per H. (2006):** *Da danske møbler blev moderne*. Odense: Syddansk Universitets Forlag.
- Hilger, Jan (2008):** The Apparel Industry in Western Europe. *Creative Encounters Working Paper* no. 22.
- Kawamura, Yuniya (2004):** *The Japanese Revolution in Paris Fashion*. Oxford: Berg.
- Lipovetsky, Gilles (1994):** *The Empire of Fashion. Dressing Modern Democracy*. Princeton: Princeton University Press.
- Löfgren, Orvar (1989):** The Nationalization of Culture. *Ethnologia Europaea* vol. XIX, 5-24.
- Melchior, Marie Riegels (2008):** *Dansk på mode! En undersøgelse af design, identitet og historie i dansk modeindustri* (PhD Dissertation at the Danish Design School and the Danish Museum of Art & Design). Unpublished.
- Mol, Annemarie (2002):** *The Body Multiple: Ontology in Medical Practice*. Durham/London: Duke University Press.

Schødt Rasmussen, Thomas (ed., 2006): *Dansk mode. Historie, design, identitet*. København: MOKO / Danmarks Designskole Printcenter.

Skov, Lise (2003): Fashion-Nation: A Japanese Globalization Experience and a Hong Kong Dilemma. In Carla Jones, Ann-Marie Leshkovich & Sandra Niessen (eds.): *Re-Orienting Fashion: The Globalization of Asian Fashion*. Oxford: Berg, 215-242.

Stoklund, Bjarne (ed., 1999): *Kulturens nationalisering. Et etnologisk perspektiv på det nationale*. København: Museum Tusculanums Forlag.

Teunissen, José (2005): Global Fashion / Local Tradition. On the Globalisation of Fashion. In Jan Brand & José Teunissen (eds.): *Global Fashion / Local Tradition. On the Globalisation of Fashion*. Arnhem: Terra, 9-23,

Wilk, Richard (1995): Learning to be local in Belize: global systems of common difference. In Daniel Miller (ed.): *Worlds Apart. Modernity through the prism of the local*. London: Routledge, 110-130.

Design Practice in Transition

DISCOURSE ON DESIGN

Design practice is in transition. We are becoming much more aware of the potential impact of design on human beings, environment, culture and even in the realm of politics. Design and designers create footprints on many different levels – designers can follow a discourse or create one. In making consequences of design visible in the public domain, designers create a new discourse.



IDEOLOGY
AND
DESIGN

“

You might notice that most definitions place

However
there is

luxury as an
antonym to necessity.

**nothing essential
about necessity.**

If the concept of **luxury is
a social construction**
then so is the idea of necessity,

because the notion


**necessity
is in an ongoing
state of flux.** ”

Nicholas Rhodes

Sex, God & Luxury Design

NICHOLAS RHODES

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The word luxury is applied so liberally that the term has become almost totally meaningless. We have luxury houses, holidays, hats, bags, and biscuits. Barely any product or service sector is untouched by the appellation. This paper considers the meanings of luxury and seeks to find a working articulation of luxury experience. It discusses some of the impulses that drive luxury consumption and reflects upon the persistence of certain assumptions and taboos based on age-old discourses of exclusion and desire that continue to constrain design in the luxury sector.

WHAT IS LUXURY?

On the one hand, consider Floyde's Pelican Bar. The Pelican Bar sits some two miles off the southern coast of Jamaica near a fishing village called Treasure Beach. It consists of a large lashed-up platform covered by a roof of foliage, sitting on wooden piles that have been planted in the sandy shallows by Floyde, a local fisherman, who had the vision to build this place almost a decade ago. He thought that it would be wonderful to sit there over the ocean, with friends, playing dominoes, drinking Red Stripe, and enjoying the sun as it sets in the Caribbean Sea. So with his own hands and no little effort, he constructed his bar. It needs regular rebuilding following the stormy seasons of September, but the Pelican Bar persists, and remains available to anyone. Floyde will collect you from the sea shore in

a small boat and sail you, hurricane lamps, some dominoes and a cooler box full of beer out to the Pelican Bar, so that you too can enjoy a glorious sunset in this way.

[Illustration 1 Floyd's Pelican Bar at Sunset.
Photo: Angie Chang, 2007]



When I describe this experience to people and I ask how they feel about it, most – with almost total unanimity – describe it in terms of the deeply luxurious. On further discussion, people sometimes describe a certain *tingle* or frisson accompanying the thought. This is, I think, significant, because I believe that the presence of this sensation is a very particular marker for the luxury experience – but more on this later.

[Illustration 2: Interior of the
Ritz Hotel, London.
Photo: Natasja King 2007.]



On the other hand, consider a typifying image of the luxurious; in this case, the interior of the Ritz Hotel in London. It features a palette of deep reds and gold, crystal, velvet swags tassels and chandeliers. This is in essence a reproduction image based on the court styles of European aristocracy from the 18th Century. It is this particular narrative of the aristocratic and these design references that repeatedly appear world round as representations of luxury, and it is my contention that the embeddedness of this heritage idea constricts the development of alternative design languages for high-end luxury.

Let us then consider some definitions: *Luxury* can be a noun or an adjective. As a noun it can refer to:

1. *a material object, service, etc., conducive to sumptuous living, usually a delicacy, elegance, or refinement of living rather than a necessity...*
2. *free or habitual indulgence in or enjoyment of comforts and pleasures in addition to those necessary for a reasonable standard of well-being... (<http://dictionary.reference.com/browse/luxury>).*

You might notice that most definitions place luxury as an antonym to necessity. However, there is nothing essential about necessity. If the concept of luxury is a social construction then so is the idea of necessity, because the notion necessity is in an ongoing state of flux. For example, few citizens of developed nations would consider indoor sanitation to be an indulgence – a view not widely held but a couple of generations back – and what of the refrigerators, telephones and colour televisions, that most consider to be baseline essentials. Necessity is therefore as much a shifting social construction of need as luxury is one of indulgence and lavishness.

When asked to describe the meaning of the idea of *the good life*, audiences tend to talk about leisure, comfort, having plenty of time; a life of abundance in general. This, however, is a relatively modern interpretation, well into the 19th century *the good life* was taken to mean *the moral life* – a life of piety and parsimony – a way of being, in which one consumed only within the clear boundaries of one's class. To consume above your station was considered to be sinful.

Until the 19th Century, access to luxury was proscribed for anyone other than God's representatives on earth. This meant luxury was accessible only to Kings (by Divine Right), and by extension to the aristocracy and the priesthood. The Royal courts set the standards and expectations of good taste, and proper behaviour was determined by courtly etiquette. Luxury consumption outside this group was restricted and regulated by specific laws and taxation

because it was believed that ordinary folk were innately ill-equipped to cope with the psycho-erotic thrill of luxury; and if exposed, ordinary people would become so addicted to an excess of spare time, rich food, fancy clothing, grand homes and so on that they were sure to be corrupted by the experience. This could only lead to degeneracy, moral dissolution and breakdown of the social order. For ordinary people, access to leisure and luxury were taboo because they were the rightful preserve of those of God-given rank. As Don Slater puts it in *Consumer Culture & Modernity*:

... luxury – defined as consumption not just above one's basic needs but above one's station – is a form of sin, rebellion and insubordination against the proper order of the world, and represents moral, spiritual and political corruption, as well as a form of madness in that men become ruled by passion rather than reason... (Slater 1996, 69).

James B. Twitchell finds this view eloquently expressed in William Hogarth's 1730s satirical series *The Rake's Progress* (Twitchell 2002, 31). A series of paintings depicting the moral dissolution and demise of Tom Rakewell, a young man who follows a path of vice and self-destruction after inheriting a fortune from his merchant father. It is significant that the character Rakewell is not born into the aristocracy and is therefore – according to the prevailing ethos – unequipped and unprepared for the superfluity he was enjoying. Thus, his delinquent behaviour could only lead to chaos, destruction and ultimately, madness.

In Hogarth, we find an explicit identification of superfluity as the rightful preserve of those of high social status. But surely, in societies without politically meaningful Royal Courts, the idea of luxury as an exclusively Royal/Aristocratic/Ecclesiastical preserve can no longer hold, and the concept and taboo of consuming *above one's station* is something we no longer recognise. Or is it?

Since the Royal Courts no longer set down the paradigms of luxury consumption or indeed good taste, these functions have devolved to a community of design cognoscenti, who constitute a self-appointed priesthood of consumption, qualified to determine the correct forms of expression of and the boundaries between *moral* consumption and *sinful* excess – that is – of (good) taste and (sinful) ostentation. As an example, Nick Compton quotes Patrizia Moroso of Italian high-end furniture manufacturer Moroso: "The concept of luxury is not tangible or material; you can understand it if you have the consciousness but you cannot simply buy it" (Compton 2006, 94).

UNDERSTANDING THE CONSUMER OF LUXURY

In his piece *The new luxe* for *Wallpaper* Magazine*, Nick Compton presents a system for the stratification of luxury consumers developed by the London-based trend agency, Future Laboratory, that comprises four levels or phases (Compton 2006, 93):

1. *Acquisitive*
2. *Inquisitive*
3. *Authoritative*
4. *Meditative*

The *acquisitive* phase can be seen as the peacock phase, in which display is most important and most flamboyant. It is typified by a heightened application of branding and heavy use of monograms, gold and glitz.

In October 2009, Harrods, the swanky London department store announced that for the first time, customers would be able to purchase the ultimate luxury accessory – gold bars. According to a report in *The Daily Telegraph* (October 15, 2009, B3), the store sells 12.5 kilograms bars of gold bullion *off the shelf*, which at \$1,072 per ounce (as of October 14, 2009) would make for a tidy \$472,666 trinket. The need to make this sort of purchase in such a public forum makes for a fine example of acquisitive consumption under this taxonomy. However, there is some evidence that consumers do over-indulge in conspicuous consumption and can – like when over-eating rich chocolate – experience *taste-fatigue* and become desensitised to its pleasures through repeated indulgence. As a result we see a tendency for people to migrate to the next phase in luxury consumption. Consumers of luxury do not remain static but tend to evolve in their aspirations and tastes. This is a phenomenon that design commentator Stephen Bayley describes as an *arc of maturation* in the luxury consumer (Bayley 2007, n.p.).

In the *inquisitive phase*, discernment and connoisseurship begin to play a part – where people's curiosity spurs them to delve more deeply into the provenance and meanings of products and brands, and this influences their choices and can lead them to become knowledgeable collectors for instance.

The *authoritative phase* follows from the inquisitive. As Compton notes: "By now, the consumer has left whim, fancy, fad and fashion behind. They are utterly confident in their own taste and expertise. They have become collectors and archivists, true taste-makers perhaps" (Compton 2006, 93). In the example below, a group of Danish aficionados combined two of their passions by commissioning bespoke ceramics from the venerable Royal Copenhagen Com-

pany. Because they held a deep appreciation and enthusiasm for the fine porcelain produced by Royal Copenhagen – a company founded in 1775, and originally co-owned by the Danish Royal Family – they felt well equipped to experiment with the brand's cultural codifications. By juxtaposing an American icon of rugged, no-nonsense utility design – the 1940s Willys MB Jeep (another passion) – against this Danish symbol of high refinement and delicacy, of aristocratic heritage and good taste, they have entirely consciously set up an artistic tension. 18 pieces were commissioned in total and no others will be made – these examples will never see food service.



[Illustration 3: Royal Copenhagen Meets Willys.
Photo & copyright: Futureessence 2008]

Finally, in the Future Laboratory model, there is *the meditative luxury phase*. It is postulated that in this phase, the consumer moves from an infatuation with things to a search for experience. The stripped-back holiday retreat might be a useful example here. Destinations such as Chris Blackwell's Strawberry Hill or Jake's at Treasure Beach – both in Jamaica – boast accommodations celebrating an absence of telephones and other modern communications technologies. The implication is that for those, who spend busy lives crammed with busy things, a shift will eventually take place, where desires shift from the material to the immaterial driven by a deep yearning for unmediated/authentic experiences and the luxury of mental and spiritual space. To quote market analysts Mintel:

[The] growing casualties of consumerism and the long hours work culture will seek refuge and mental/physical detoxification on these holidays (Mintel 2007, n.p.).

PHILANTHROPIC LUXURY

To these four phases Bayley adds a fifth. This is where the act of philanthropic giving generates feelings for the donor similar to those of high-level consumption.

We can see an example in a recent print advertisement for the luxury writing instrument brand Montblanc; a photograph of the actor Nicholas Cage, shows him displaying his Montblanc watch alongside the tagline: “Helping others gives success true meaning.” The copy goes on to describe, how your purchase of this luxury timepiece results in a donation to the charity Heal the Bay, thereby making explicit links between philanthropy and indulgence. This behaviour has resonances with the ideas discussed earlier connecting excess with sinfulness.

The idea of indulgence carries other religious resonances; in Catholic theology the term *indulgence* means a full or partial remission of punishment due to sin, and this can be granted in a number of ways, including charitable works. Thus, the notion of offsetting one’s indulgences has been alive for some time, and like modern-day carbon-offset schemes, those with the means could purchase a sort of *sin-offset*. No longer practiced by the Catholic Church, the granting of indulgences has historically been subject to great abuse, when, in exchange for money, professional *Pardoners* would promise remission from many serious misdemeanours to the aristocratic and wealthy, who could afford to pay up. This connection between luxury and philanthropy appears to have gained major momentum in the post-recession, eco-aware, guilt-ridden *noughties*; and it is a relationship that continues to be widely exploited by luxury brands.

As a further example at the time of writing this paper, the New York luxury Department store Bergdorf Goodman was running a promotion, whereby the lavish yet socially conscious handbag purchaser could simultaneously feed African children under their *Feed 2 Kenya* Bag scheme. A store sign in the handbag department read: “Your purchase will feed two Kenyan schoolchildren for one year and help to employ the women of their community.” Not that this idea of philanthropy as a marker of high social status is a new or culturally exclusive phenomenon. We might see parallels in the practice of Potlatch – an ancient ceremony practiced for thousands of years by the indigenous peoples of North America, whereby the extent of a Chieftain’s preparedness to give away or destroy his possessions corresponded to the loftiness of his social status.

HOW DO THESE IDEAS INFORM LUXURY DESIGN?

To understand how these ideas may inform luxury design, we need first to explore what it is that identifies an object or service as luxurious at the present, because in a post-optimal age, high quality is a base-line expectation and no longer a point of difference. The key questions are:

- What is common to all ideas of luxury?
- And in an age when anything can be described as luxurious, how can we identify high luxury from everyday indulgence?

In response to the first question – one key feature must be exclusivity. Or to put it another way: Scarcity provided by restriction or constriction of access. Whilst this constriction is most commonly applied by use of high price tags, I would argue that this is not the only means. For instance, to return to our earlier example of the Pelican Bar, the cost is not a primary constriction – the beer costs much the same as it does on land – the primary generator of the Pelican Bar's exclusivity is the knowledge of its very existence. So there are alternative generators of exclusivity; or *gates*, as I would prefer to call them. These might include:

- Provenance – exoticism
- Provenance – heritage
- Restricted or constricted availability – the gatekeeper
- Restricted or constricted availability – seasonality
- Restricted or constricted availability – one-off or short-run
- Expertise of the chef
- Mystical insight of the shaman
- The Maker's mark
- Techno-magic
- Cultivated expertise/taste – the editor/curator/connoisseur
- Insider knowledge – the cognoscenti, the trailblazer
- Auteurship

However constricted, access in itself does not guarantee a luxury experience, the pull towards a gate is generated by a narrative that references particular paradigms of luxury.

Take *Alaskan Smoked Porter*, a beer, which its manufacturer, the Alaskan Brewing Company, promotes with the following description: "Our *glacier-fed* water originates in the *1,500 square-mile Juneau Ice Field*. Prior to brewing, selected *malts* are *smoked in small batches*

under carefully controlled conditions... using *local alder wood*" (*Alaskan Brewing Company*, 2009, n.p. (*my italics*)). This example offers an extended poetic narrative with key words highlighted. The strength of this narrative lies in its particular intimations of exclusivity: *glacier-fed... selected malts... small batches... local alder wood*. These words all go to build an evocative mythologising narrative of wildness, remoteness, purity and scarcity.

It is notable that these mythologising narratives of exclusivity are invariably expressed explicitly and highly extended. We find another example in the narrative of the Ascent line from the British luxury mobile phone manufacturer and retailer VERTU:

... unmistakably built for power and performance. Every component is engineered for strength. The muscular case is forged from high performance metal. The ear pillow is made from the same high-tech ceramic that protects the Space Shuttle. Even the logos are made from a material used to strengthen industrial drill bits (*VERTU 2009, n.p.*).

Or from the luxury leather goods Company Louis Vuitton, where tradition and craftsmanship inscribes exclusiveness:

Today, as in the past, the House cultivates its prized craftsmanship, the passion for skilled handiwork and the most exquisite materials... Each stunning detail and signature element respects this long tradition of excellence... extraordinary leather craft is handed down from master to apprentice, generation after generation (*Louis Vuitton 2009, n.p.*).

Now, let us return to the second question: In an age when anything can be described as luxurious, how do we identify true luxury?

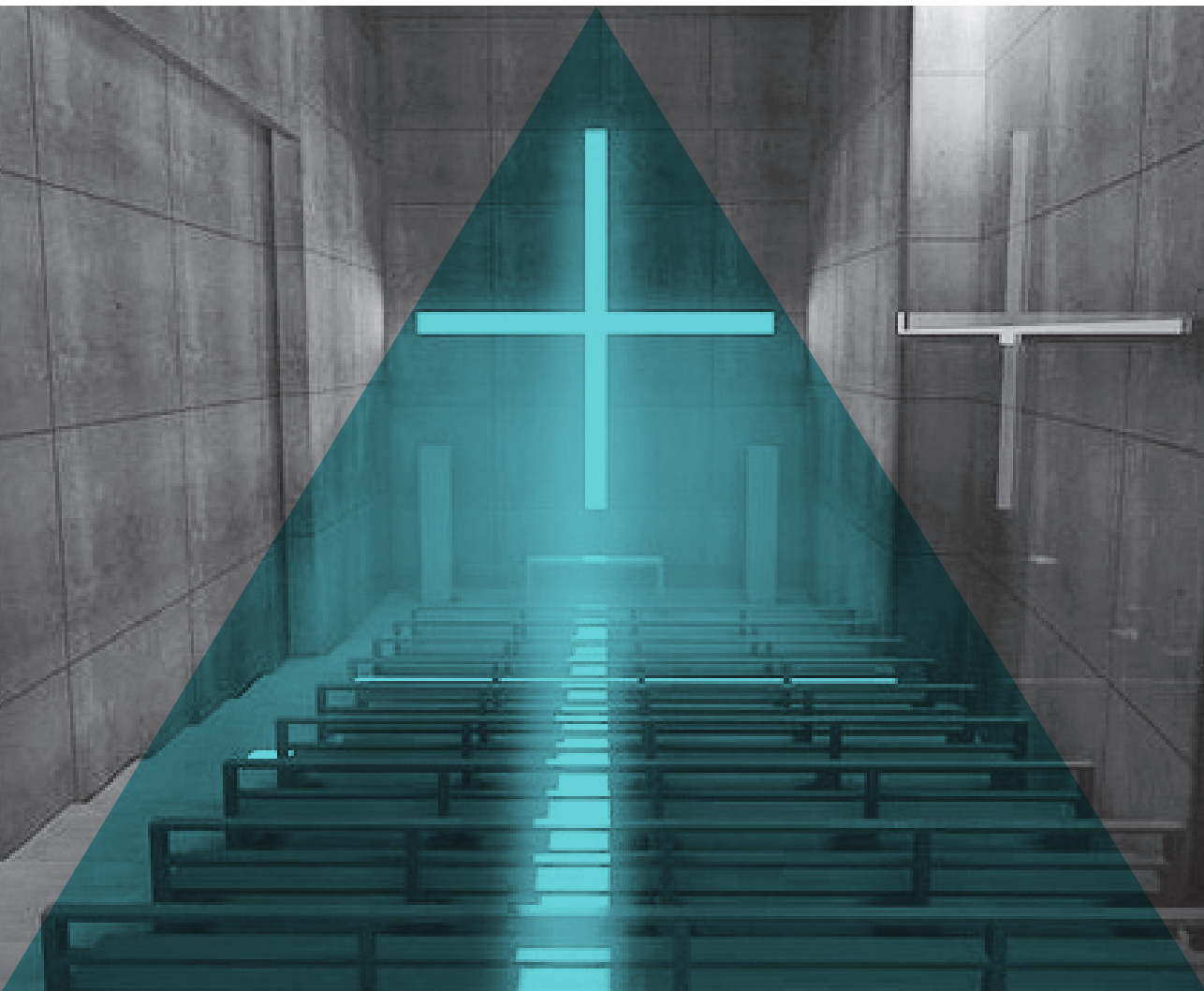
Twitchell makes an interesting observation linking luxury consumption and transcendent experience: "... getting to these sensations may show the developing religious nature of modern luxury. For many shoppers consumption mimics epiphany, and luxury shopping becomes an almost transcendental experience" (*Twitchell 2002, xv*).

I would even go further, and contend that the marker of a true luxury experience is in this flashbulb moment – the frisson – that accompanies it. It is the experience of this particular sensation that marks out the luxurious from the merely indulgent. Interestingly, it appears that the neurotransmitter that triggers this sensation is the same as that involved in sexual arousal and religious transcendence. Serotonin, or 5-hydroxytryptamine (5-HT), is believed to be associated with sexual and religious ecstasy as well as excessive

shopping. Indeed, Twitchell quotes Amy Finnerty, who reports on serotonin re-uptake inhibitors, being used by consumers to “curb a lust for shopping” (Finnerty 1997, *n.p.*).

Perhaps the serotonin or 5-HT link between sexuality and luxury consumption should be unsurprising given that transgression, sin, guilt, luxury and excess have always been so intimately wrapped up.

However, I would go even further than Twitchell, to contend that this flashbulb moment, this intense 5-HT rush, is the marker and pay-off of true luxury consumption. It is the experience of this specific sensation that differentiates the truly luxurious from the merely indulgent. True luxury experience is therefore a sensation residing in the consumer, and the essence of this message is that no matter what a producer does – it’s the sensation a consumer *feels* that counts.



DESIGNING LUXURY

If it is the goal for luxury producers to associate a 5-HT hit with their products and services, then it is a designer's job to construct luxury experiences as a journey, enticing a consumer to transgress¹ into a very different, heightened state in order to provoke that 5-HT kick.

This notion of transgression was and remains well understood by the architects of great ecclesiastical spaces. To understand the construction of emotively heightened environments, one could analyse many great buildings including Istanbul's Sultan *Ahmed Mosque*, designed by Sedefhar Mehmet Aga, or Tadao Ando's *Church of Light* in Osaka for example. The experience of these places compels you to appreciate the remarkable orchestration of elements – of scale, proportion, sound, smell, and light. These spaces are expressly intended to present worshippers with a sharp rupture of experience in the crossing-over from everyday life, and have the ultimate objective of inducing an intense, giddy 5-HT surge.

As we have seen, evocative mythologising narratives are mobilised to entice the impulse to *cross-over*. Whether the narrative is mystical, wild, or technological, its potency is measured by means of its resonance and its contrast with the familiar.

To understand the nature of luxury, we began by exploring the historical connection to morality and the notion of *the good life*. We moved on to the evolution or *maturation* of the contemporary luxury consumer from peacock to connoisseur to authority to someone seeking spirituality to philanthropist. And we ended up in church. In terms of experience, a close relationship between luxury and the Divine is hard to deny. Analysis of how transcendence is orchestrated by great ecclesiastical architecture as well as other awe-inducing spaces may contribute to the development of theories for designing luxury experience.

As for now, we can propose that an effective luxury experience is one that conveys us by means of extended narrative on a thrilling boundary-crossing journey, to transgress literally or metaphorically, into a place of otherness. Be that in a soaring cathedral, a vertiginously expensive restaurant, or perhaps on a wooden platform teetering precariously in the Caribbean Sea.

¹ From the Latin *transgredi*, meaning step across. Online Etymology Dictionary: http://www.etymonline.com/index.php?allowed_in_frame=0&search=transgression&searchmode=None.

REFERENCES

Alaskan Brewing Company (2009) Alaskan Smoked Porter. Online: <http://www.alaskanbeer.com/smoked-porter.html>.

Bayley, Stephen (2007): Loaded generation: The lives of Britain's new super-rich. *The Independent* September 16. Online: <http://www.independent.co.uk/news/uk/this-britain/loaded-generation-the-lives-of-britains-new-super-rich-402354.html>.

Compton, Nick (2006): The new luxe. *Wallpaper* Magazine*, December, 93-94.

Online Etymology Dictionary. Online: http://www.etymonline.com/index.php?allowed_in_frame=0&search=transgression&searchmode=none.

Dictionary.com Unabridged (2009). Online: <http://dictionary.reference.com/browse/Luxury>.

Finnerty, Amy (1997): Shop till you pop. *New York Times*, April 6. Online: <http://www.nytimes.com/1997/04/06/magazine/shop-till-you-pop.html>.

Louis Vuitton (2009): The World of Louis Vuitton: Craftsmanship: Leather Goods. Online: http://www.louisvuitton.com/web/flash/index.jsp?jsessionid=SLGY1RKOBWEFOCRBXUFFAGIKEG4RAUPU?buy=1&lang=en_GB&direct1=home_entry_gb [retrieved 24 May 2009, no longer available].

Jollypeople: Promoting Charity around the World (2007): Nicholas Cage joins Montblanc's band of Celebrity Ambassadors (posted 4 March). Online: <http://jollypeople.com/nicholas-cage-mont-blanc/86/>.

Mintel (2007): *Health and Wellness Holidays - UK - February 2007*. Online: http://academic.mintel.com/sinatra/oxygen_academic/export_basket/show&type=RCItem&sort=relevant&list=export_basket/display/id=451583/display/id=219237/list/id=219237&type=RCItem.

Slater, Don (1996): *Consumer Culture & Modernity*. Cambridge: Polity Press.

Twitchell, James B. (2002): *Living it up: Our love affair with luxury*. New York: Columbia University Press.

VERTU (2009): Ascent Ti Available at: http://www.vertu.com/in-en/?gclid=Cp7oqNTVopoCFRiF3godQUpVKw#in-en_ascent/ascent-ti [retrieved 24 May 2009, no longer available].

MATERIALS
EXPRESSION
FROM PREVIOUS USE

CRITERIA
FOR
DESIGN

When can you find a new
perspective
Hvor de kan finde

FORMAL DEVELOPMENT

HERITAGE

FEARLS
IN THE
PROCESS



How do
we design
everyday
products
Aesthetics
to be
best in life?

CRITERIA FOR DESIGN

The *raison d'être* of design is much more than problem solving. It is exploring and realising potentials to improve and enrich our lives. Design value is not limited to functionality. Value in design comes from a number of sources: Materials, aesthetics, tactility, meaning, interaction, involvement, etc. The best things in life are for free – the best design transcends its original purpose.

EVERYDAY

AESTHETICS

“

... so, it's a kind of

constant exchange between

being

completely

irresponsible

and

responsible.

There is this playful part of design,
which is necessary.

To be
humorous,

playful, childish,
stupid

whatever, that

cannot come from responsibility;

it comes only from moments of

absence of responsibility.

”

Boris Berlin

less economic
consideration
More ^{everyday} aesthetic
awareness

the best
thing in
life are
a more longterm
process brings
greater value

Be aware of the
users' heritage
to bring them
into the future

↓
methods

↓
co-design (process)

METHODS
(QUALITATIVE)

ECONOMICS

MATERIALS HAVE
TO BE TAKEN
MUCH MORE
INTO ACCOUNT
TO CREATE
ENRICHING
EXPERIENCES

On Design Responsibility and Irresponsibility: An interview with Boris Berlin of KOMPLOT Design

MALENE LEERBERG

LENE WUL (TRANSCRIPTION)

Malene Leerberg is a Development Consultant at Kolding Municipality in Denmark, designing and facilitating processes for policymaking and policy implementation. She holds an MA Research Degree in art history and is finishing a PhD dissertation on design process at the Aarhus School of Architecture and Kolding School of Design in Denmark.

Lene Wul is currently a Curator at Billund Museum in Denmark. As of September 2012, she will be City Archivist at Kolding Municipality. Previously she has been a Research Secretary at Kolding School of Design and done research on user participation in health care. Holding an MA degree in history, she has worked as an Archivist, Curator and Researcher for the Danish Data Archive as well as at the University of Southern Denmark.

For a quarter of a century, designers Poul Christensen and Boris Berlin have been partners in KOMPLOT Design. With a substantial catalogue within graphic as well as product and furniture design to their name, they have made their mark as a highly creative and innovative Danish design studio. In particular, the two designers have been recognised for their contribution to the renewal of the Danish furniture tradition. Using new materials and new technology, they have dared to experiment with form as well as meaning to challenge the conventions of chair design characterised by their award winning NON chair (2000) and the GUBI chair (2003), which have both become fixtures at the Museum of Modern Art in New York. In recent years, their NOBODY chair (2007) has been praised for explicitly addressing the subject of sustainability and responsibility in design.¹

We sit down with Boris Berlin in KOMPLOT Design's offices on a windy day in the Fall of 2009, surrounded by sketches, models and design objects. Some are designs that can be seen in private homes, in offices and stores; some are prototypes ready to go into production and others are prototypes that will never make it out of the studio. Among them are a few chairs. The topic of the interview is *design responsibility from the perspective of a practicing designer*.

¹ The Fall of 2010, Poul Christensen and Boris Berlin decided continue their work as designers separately as well, yet KOMPLOT Design lives on, and they maintain an ongoing dialogue. For more on KOMPLOT Design, please refer to <http://www.komplot.dk>.

Malene Leerberg (ML): Let me begin with a statement from KOMPLOTT Design's website saying: "We believe that good design is not just a solution for the primary so called pure functional problems, but creation of the message, that fills objects and concepts with cultural, philosophical, aesthetic and poetic content." You don't mention the word responsibility; however, it seems very much to be part of your design and your approach to design. I would like to ask you to describe what design responsibility means to you as a designer?

Boris Berlin (BB): Yes, it is a very complex thing, definitely, because responsibility consists of so many components. There is a kind of civil responsibility, which is general, I hope, a general value for us today, so what we are doing is placed somehow in the context of the whole development of society. We're not – definitely not – doing luxury things for a couple of people. It's something different. So this is one thing; I don't know what to call it other than general civil responsibility, which also consists of many, many things. Today, it's very difficult not to mention ecological responsibility, for example, and social responsibility. It means things have to be available to people. We think about transportation, which comes under ecology, and prize at the same time and so and so on. And then there are other responsibilities: responsibility for the customers that we work with, their image and their product programme. We ARE responsible if we end up influencing their product programme and the content of the company production. So, we carry responsibility for the company as well as for our own image, our own consciousness. We think about that, and at the same time we're probably not thinking about it all the time, otherwise it becomes a paralysing situation. If you think about being responsible all the time, it's better to turn the key.

ML: It can be limiting to one's creativity to be responsible all the time.

BB: Yes, yes, yes – so, it's a kind of constant exchange between being completely irresponsible and responsible. There is this playful part of design, which is necessary. To be humorous, playful, childish, stupid, whatever, that cannot come from responsibility; it comes only from moments of absence of responsibility.

ML: Right, maybe you could even say that sometimes you have to act irresponsibly as a designer to be responsible?

BB: Yes, I think so – you have to act, and then you have to expose what you have done to some kind of judgment, so there's a kind of constant seesaw between these positions.

(Illustration 1: Boris Berlin at the NORDCODE Seminar & Workshop at Kolding School of Design (photo by Torben Lenau))

ML: In your lecture at the NORDCODE Seminar & Workshop at Kolding School of Design you mentioned that initially, you intended to become an architect, but in the process of applying to schools you said that you became afraid of the responsibility of being an architect, because a building has such a long life, whereas – at least from that perspective – you thought that design didn't have as long a life. So you chose to become a designer instead. Could you tell a little bit more about what you were grappling with at that point in your life, and perhaps how your perspective may have changed over time?

BB: Yes. At the time, I probably thought that I was not responsible enough to become an architect. So, I simply got scared of the perspective, and also, the thing is, this was taking place in the very late 1960s and in the context of the Soviet Union, though there is not very big difference between what was taking place in different parts of the world at the time, it was just worse, it was more visible, what architecture was doing there; that was a terrible crime in general. So, I thought that on a scale where the poet is at the one extreme end and the architect at the other, I will choose something in between. At the same time this is an illusion; of course it's an illusion. A poet is also responsible for what he's writing because the word can kill, the word can sentence – and words sometimes live much longer than buildings. Yet, somebody has to solve social problems and be architects as well. I think mainly the difference, as I saw it at the time, was that I



had been doing the *art thing* for many, many years, ever since I can remember, so I could easily understand what it would be like to be an artist – in worst case that nobody will ever see what you produce. And in this case, what is responsibility then? There is no responsibility at all. Whereas the activity of architects is so complex; architecture is really part of the social and political activities of society, and you know architecture is really the music of the time, right?! So, design, I thought, is somewhere in between, but it was probably an illusion. Today, I think of the oceans of the world: They are polluted not by architects, they are polluted by designers – with plastic bags and stuff like that.

ML: Right, there is this big pile of plastic bags floating around in the oceans of the world, which is a really weird phenomenon.

BB: ...which is very weird, yes.

ML: Yes, so what to you is responsible design, and what perhaps is not?

BB: What is it to be responsible? Well, I think, first of all, it's about the ability to ask questions, and I think we have become much more responsible today. I don't think that we were even thinking about these issues when I was studying design. It was really about these primary needs, so-called primary needs, and aesthetics and that was it – giving form, giving shapes to objects. Though today, I think at least in our design, more statements question our professional activity. I don't think that we can rescue the world; it's not the designers' job as such, it's up to all of us. I don't think that just by creating our designs we have the instruments to rescue the world, but we can at least ask some questions.

ML: Right, and make some contributions?

BB: Yeah, some contributions, some statements, some attempts, and you know how it is today: what we considered to be responsible yesterday, may turn out to be completely irresponsible tomorrow, because we're finding out that these things were not correct, these materials were not correct. We're finding out new features and new properties of materials. We are just beginning.

ML: Do you think, then, that responsibility can be communicated through design – for instance by asking these questions?

BB: Sure! Absolutely, design is communication; it's a message in a bottle, so I hope somebody will open it and see what we're doing.

ML: Let's talk a little bit about chairs! KOMPLOT Design works within many different domains of design. You work with graphic design as well as industrial design, and for some reason you're most known for your furniture design and especially your chairs. Can you tell us a little bit about how you got into this field?

BB: By chance, it could have been something completely different, and the reason why we're more known for designing chairs – though we don't design chairs – is because we're spending much more time on that; we're in contact with furniture manufactures, especially from the Danish industry. We could design many other objects, and we have designed many other objects. It is the same discipline; there is no big difference between designing a marker pen and designing a train, or whatever. For my diploma I specialised in means of transportation. I definitely believe it's the same; it's a question of objects having different names, but the methods are the same.

ML: Right, the design methods are the same, but referring to what you said about posing questions, perhaps the chair as a cultural phenomenon is a very good object to use to pose questions?

BB: Yes, that's absolutely true, the chair has a very peculiar significance to European culture, and I don't even know if it's the issue of our conversation today why it has become so?

ML: But you can say that the chair is very relatable to people.

BB: Yes, but there are other objects that are as relatable. Different cultures choose different darlings; you know, in Greece, they will make coins. Coins are VERY relatable. They just produce new coins and new coins; they could just as well use old coins. And the ancient Etruscans, they were making urns for burying people in such enormous numbers that there are probably more urns left by the Etruscans than there were Etruscans. It has something to do with beliefs, I think, and I have a theory: It has something to do with the development of democracy. Within European culture the chair as such appeared in the beginning as the king's seat, as a throne, and was adopted by the people only after the bourgeois revolution. Before that, people were sitting on benches, and in the old society the chair was something you could only inherit. With bourgeois society people became able to buy a chair. If you have money you can buy a throne – and then everybody wanted to have his own, to be his own king. It has something to do, I think, with the development of democracy. The chair changed its character also, so it became less and less of a throne, which was an

instrument expressing just power, nothing else, or death or whatever. And it developed into something that came out of the *klismos*, which is definitely not a throne.² It comes from the first democracy we know in European culture and provided opportunity to sit in a free posture; not in a posture expressing power, but in a posture expressing relaxation, expressing freedom, freedom of movement. This is probably the reason why the chair became so important, strangely enough, and this is the object.



² The term *klismos* refers to a type of ancient Greek chair, which is known from depiction on pottery and in bas-relief from as early as the mid 5th century B.C. Klismos comes from the word *klinein*, which means to bend or to lean, and the chair usually has four curved legs and a wide, curved back rest.

[Illustration 2: *The NON Chair*, mono-block chair moulded in PUR-rubber, by KOMPLOT Design for Källemo AB (Sweden), 2000 (Photo by Curt Ekblom)].

ML: In your lecture, you talked about the way you designed chairs; how you felt there were many, many chairs, and at some point you decided to create a non-chair – a chair which is almost not there, so what were your intentions with the *NON Chair*?

BB: Yes, the intention was simply to step out of the race; the race that had become a meaningless attempt to make something more visible, more striking than the previous chair, so we decided not to design a chair; it's a non-designed chair. It's just a symbol; it's not actually a chair. This is why it was an important step; it's a statement about the chair.

ML: And the *NON Chair* or the non-designed chair is also an example of how designers work interdisciplinary, because with the chair you also became designers of the process of manufacturing the chair – can you tell us a little bit about that?

BB: Yeah, and not only the process, it was also about the responsibilities to develop a process that was available to Scandinavian companies that cannot invest millions in the production process. So, this was about simplifying the production process, simplifying the tools. And the process is not built with the intent to produce millions and millions of chairs every second. Still, the lead time is about ten to fifteen minutes, and all in all, it's probably half an hour. To call it an industrial process isn't correct; it's semi-industrial, and we developed that process; it hadn't been done before. Everyone told us that it couldn't be done, so it was also an interesting challenge. And by the way, involving a company in such a risky new development is also very irresponsible in a way. It was a question of believing. Belief and responsibility is probably a little bit different; we believed it was possible.

ML: And you convinced the companies as well that it was possible; they saw it was possible.

BB: Yes, well of course it didn't just happen out of nowhere; we made prototype tools that proved that it could be done and only after that did they invest in production tools.

ML: Another aspect of the chair is that it's very durable; it can be used outside as well as inside and also it doesn't come in any packaging or anything.

BB: Yeah, there are so many nice aspects. It's this mono-block chair; it's made from only two materials, there is one production process, there is no surface treatment, the material as such is very durable, and it's the same material that we use for making shoe soles. So it can be used indoor, outdoor and so on. It has strange areas of application: It can be used in the bathroom and in the shower. If you cannot stand in the shower, you can sit on this chair. So, it's a very strange object that can just be anywhere, and it's very quiet both visually and physically. I remember the first time I was walking down a very narrow staircase with this chair, bumping into walls, and nothing happened.

ML: Usually, when you bump a chair into the wall you can hear it.

BB: Yeah, and nothing happened neither with the chair nor the walls.

ML: So it's a very quiet existence?

BB: Yeah, and it can just sit there without screaming. It was about silence, it was about John Cage and expectations, if you know this piece – this masterpiece of music.³



[Illustration 3: The GUBI Chair, wooden chair moulded in 3-D veneer, by KOMPLIT Design for GUBI A/S (Denmark), 2003 (Photo by Stuart McIntyre)]

³ The John Cage masterpiece that Boris Berlin is referring to is the minimalist composer's legendary 4'33" from 1952. In all its simplicity 4'33" consists of 4 minutes and 33 seconds of silence performed by a classical orchestra in front of a live audience.

ML: Right, interesting comparison. You could say that whereas the *NON Chair* is very humble and minimal, your *GUBI Chair* seems to take an almost opposite direction: It's more about luxury, and the technology seems to be present in the design – even if the *NON Chair* is very technological in its production, it doesn't really show in the chair somehow.

BB: I'm not sure that *GUBI Chair* people, who are the end users, are aware of this technological innovation that is the chair. I think they see another level, which is also embedded and has to be. You cannot stand next to the chair and explain innovation – it's not enough. It's simply this new technique that gave us the opportunity to justify telling another story of a chair. So, it's also about telling a story of a chair design, basically starting from the second half of the 20th century with Charles and Ray Eames, Arne Jacobsen, and their experiments with multi-ply wood. And suddenly, we got our hands on this fantastic new technique, so it became meaningful to design a new chair. I don't think it's a luxurious chair.

ML: No?

BB: No, it's only a small drip, a little thing, a little print in its own. It has other unusual, tactile properties; it has another different communication with the body, becoming soft, becoming not soft, and not being soft. It gives freedom in the choice of sitting postures. So, I think it communicates in a completely different way with the user, and then, if this person is more interested in the object and starts studying it, the person will discover that it is very thin and so on – discover the other levels of this design. But luxury, I don't think so, what is especially luxurious about it?

ML: No, maybe you're right.

BB: It's just friendly!

ML: It's very friendly – it's very friendly and welcoming.

BB: ... and maybe sweet, I don't know. It's nice, a nice thing.

ML: But it's interesting that it has a very strong appeal in that sense, and when we talk about responsibility we often talk about function or manufacturing or distribution but isn't it also responsibility in terms of appeal and communication and aesthetics?

BB: Of course, of course we just didn't mention it, speaking about responsibility, speaking about pollution, because I think the worst pollution that we as designers – fellow designers – are responsible for is mental pollution. We have polluted the world with an enormous quantity of absolutely unnecessary, stupid objects with only one purpose: To be sold and then as quickly as possible thrown away to give room for new objects. And this mental pollution somehow also reduces people's ability to evaluate, to judge. I think it was very nice that when I inherited the furniture of my grandparents, they were full of stories and full of memories – so I think if we can create objects that people like so much that they don't throw them away, they will pass them on to their children. That would be very nice!

ML: And your *NOBODY Chair* has become very celebrated as a design that's very responsible in terms of recycling and sustainability. What was your initial idea? Or WAS your initial idea to create a responsible design? How did it come about?

BB: We like mono-blocks very much. We have designed several of them; not only the *NON Chair*, there are several examples. You are just committed to making a simple product, using one material, one production process. It means that it's produced at one location; there is no transportation of components from one place to another. Unfortunately, we cannot avoid transportation entirely. We cannot move the consumers to the factory where it is produced; we cannot move all sources of raw materials to the factory where it's produced. But at least the attempt to reduce it, this reduction, this is what is expressed by the *NOBODY Chair*. It's just a piece of cloth; there is nothing else in it. There is one material; that is the entire final product. It's finalised in the same spot where the raw material is being produced, except of course the recycling of bottles, that is taking place at another place, and the production of polymer fibre. But in one place, within a distance of 15 metres, you go from the roll of polymer fibre felt to the final product. This is a very nice aspect, and because it's one material you can recycle it completely; you don't have to separate it, you don't even have to use a knife to cut it or whatever. So, it looks like an OK thing to work with.

ML: You mentioned in your lecture that you had an assignment or proposition from the Swedish Prison Authority that was connected to the development of this chair.

[Illustration 4: *The NOBODY Chair*, Polymer fibre chair thermo pressed from one PET felt mat, by KOMPLOT Design for HAY (Denmark), 2007 (photo by Gunnar Merrild)]



BB: Yes, yes, it triggered it. And we were just ready to do it. We were experimenting with this material beforehand, and we even made a *GUBI Chair* from the material, though it was in a combination of a steel frame and the felt. I even think we had a few sketches of something that was beginning to come together. Then these people came along with this brief, that's true, that's true, an impossible brief and we thought well, we have this material, we might be able to make this product. Everything in the brief was pointing towards negation of materials: NO use of metal, NO use of wood, NO use of this, NO use of that. So what CAN we use? And we had this material, so we thought let's try to make something without any screws, cavities, possibilities to make weapons and so on and so on – as the demands were in the brief. Then, unfortunately, the person who was our contact died, and his idea died with him – but anyway...

ML: Anyway your ideas somehow lived on?

BB: Yeah, yeah we couldn't stop.

ML: And of course, the opportunity to use the recycled bottles that produced the material was also an input.

BB: Yeah, yeah of course. It was a very interesting part of it, though I don't think that it will solve the problem of the enormous quantity of bottles that surround us. But somehow at least it creates a possibility of making caviar, of upgrading the re-cycling process, of *up-cycling*.

ML: Right, *up-cycling*, that's a nice word.

BB: Yes, it is. I think it's a question of *up-cycling*, because making a new bottle is really re-cycling. And the thing is that you can hardly make a new bottle out of used bottles, because it will be less transparent afterwards; some of the properties disappear. So, what we see when we see Pepsi Cola or Coca Cola or whatever is that these bottles are made of the highest quality, virgin polyester, otherwise they won't be transparent. Many other things of course can be made from the bottles, but normally it goes down, it's downgrading, *down-cycling*, and here, out of something that is disposable, to make something like a chair that has a much longer lifetime, yeah, I would call that *up-cycling*.

ML: Do you see the intentions you had and the hopes that you had for the chair reflected in the way it has been received by critics and by the users?

BB: Yeah, I think so. The message has been read.

ML: The message in the bottle? The bottle has been opened! For some final thoughts, let's turn to the future of responsible designers and design responsibility.

BB: Oh, my God! I don't know what will happen. I hope that we will become more and more responsible and also more and more educated, because our problems come VERY much from ignorance. There were so many things we were not aware of because we were ignorant. We didn't know what would happen. For instance, I don't think that when the use of DDT⁴ began that anyone knew it was so poisonous. Now, we're aware of these things, and we're becoming more and more aware. But it's like walking in the mountains: when you get to the top of the mountain you were trying to climb, you discover that there are other mountains. So, I don't know what will happen, we know more and yet we're discovering that we don't know at all what's in front of us.

⁴ The acronym DDT derives from the chemical name Dichlorodiphenyltrichloroethane, and is a synthetic pesticide that was widely used in agriculture from the early 1940s to the late 1960s, when it was recognised as an environmental toxin, highly poisonous not only to insects, but to all living beings, and subsequently banned in many countries.

ML: Yes, but still there also needs to be a pinch of irresponsibility to be a responsible designer?

BB: Yeah sure, otherwise it will lose its nerve and this childishness. You know, the difference between grown-ups and children is probably exactly in irresponsibility, and this is why grown-ups are so boring and dull, and children, on the other hand, are so cheerful and playful, because they don't know so much, YET!

ML: Right, I think that's a very nice way to end the interview. Thank you very much!



Illustration 5: NOBODY's, Polymer fibre chair thermo pressed from one PET felt mat, by KOMPlot Design for HAY (Denmark), 2007 (Gunnar Merrild for HAY)



DESIGN AND RESEARCH

Given the eclectic nature of design, what is then design research?

Both scientific and scholarly research can be described to be in search of the truth. However, the truth is not an absolute, it changes over time, due to new knowledge and/or shifting intellectual paradigms. Perhaps design and design research offer a new position. Instead of leaning towards traditional systems of research, design researchers could and should take an active role, leading the direction of research.

DESIGN RESEARCH
ENHANCING/ENRICHING
COMMUNICATION
ACROSS RESEARCH
AREAS

COWM

“Other disciplines related to design,

like ergonomics
and human factors,

are normative

and hence
judge artefacts.

Semiotics,

on the contrary,

is a descriptive discipline,

which can

be used to **account for the**

articulation of relations

that a
certain artefact predisposes

and to

**devise different sets of
alternative articulations.**

”

Simone Marian & Alvis Mattozzi

Responsibility through Design, Design through Semiotics

The case of the Italian Smart Meter: an attempt to remediate its non-responsibility

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INTRODUCTION

We present an attempt to design a device for the visualisation of electrical consumption in order to remediate the way consumption is (not) taken into account by the new Smart Meters (see ill. 1b) installed in basically all Italian households by ENEL, the Italian national electric utility company.

If we assume that responsibility within design has to do with taking into account the effects generated by a certain artefact, then the artefact we present, designed by Simone Marian,¹ is an attempt to make a well-known household device more responsible first toward electrical consumption and, eventually, toward environmental issues related to CO₂ emission.

Our paper is furthermore an attempt to test the ability of semiotics to dispose responsible design. The semiotic approaches we follow are one established by the Danish linguist Louis Hjelmslev (*Hjelmslev 1943*) and further developed by the French-Lithuanian semiotician Algirdas J. Greimas and his school (*Perron & Collins 1989*), and a complementary one developed by Madeleine Akrich and Bruno Latour (*Akrich & Latour 1992*). Thus, with the term *semiotics*, we refer to a discipline, which describes relations and articulations of relations, and which, through these descriptions, is able to account for signification (*Mattozzi 2006; 2010*). Since “humans do not see and act on the physical qualities of things, but on what they mean to them” (*Krip-*

¹ The artefact we present is a concept that Simone Marian designed for his Bachelor degree at the end of a three years design programme at the IUAV University of Venice. Between 2004 and 2011, Alvise Mattozzi taught *Semiotics of Industrial Design* at the university. Simone came up with the idea for the design concept after attending Alvise's lecture about the new Italian Smart Meter. Thus, the article is the outcome of our collaboration and has been elaborated by both of us. Parts of the article have been written by Alvise Mattozzi (**A quick overview of ENEL's Smart Meter and A concise analysis of the old and the new meters**) and parts by Simone Marian (**Introducing Espy**) others (**Introduction and Espy as a remediation of a non-responsible design**) by both of us.

pendorff 2006, 47), we consider semiotics to be a fundamental discipline for design. Other disciplines related to design, like ergonomics and human factors, are normative and hence judge artefacts. Semiotics, on the contrary, is a descriptive discipline, which can be used to account for the articulation of relations that a certain artefact predisposes and to devise different sets of alternative articulations. On the basis of these descriptions, it is possible to decide and eventually implement, which articulation is more responsible, i.e., as we have stated before, which articulation takes better into account the effects generated by a certain artefact.

Latour proposed an eventual non-modern constitution, which should dispose a new way to manage the collective of humans and non-humans that constitutes our society (Latour 1999). If we assume this non-modern constitution and the two powers guaranteed by it, namely the one of *taking into account* and the one of *putting in order* (cf. Latour 1999), then, from what we have just stated follows that semiotics would be related to the first power; it has to investigate and inventory the articulations of humans and non-humans, which are available. Design, on the other hand, would be related to the second; by devising and developing artefacts, it hierarchises, selects and implements these articulations.



Illustration 1 a/b

A QUICK OVERVIEW OF ENEL'S SMART METER

In 2001 ENEL, the Italian national electric utility company, started to replace the old, traditional electro-mechanical meters (see ill. 1a) with new electronic ones (see ill. 1b) – generally referred to as *Smart Meters* – with an outer shell designed by renowned designer Michele De Lucchi. This was an extraordinary endeavour: By 2006, 30 million meters had been replaced with an average of 40,000 replacements

per day (Cannatelli 2003). The operation cost 2.1 billion Euros. ENEL was the first electric company in the world to carry out a nationwide replacement of electro-mechanical meters with electronic ones.

ENEL's Smart Meter² is part of a network for the management and monitoring of electricity distribution and consumption called *Telegestore* (Tele manager). The meter can be turned on and off with a switch placed on the lower part of its shell. It has a display that gives various types of information, when prompted by pressing a button placed on the right side of the display (see ill. 1b). First of all, the display shows the meter's status: A small "L1" on the left indicates, if it is working properly, while a small "V!" on the left indicates, if it is not working. In addition, the display provides detailed information about the contract and the electric consumption. More specifically, each time the button is pressed, the display gives information about:

- The client's account number
- The kind of rate the client pay
- The amount of electricity (measured in kilowatts) being consumed at the time of the display reading
- More general information about electrical consumption in kilowatts:
 - The amount of electricity that has been consumed during the current billing period up to the time of the display reading
 - The highest point in consumption during the same period
 - The amount consumed in the previous period
 - The highest point in consumption during the previous period
- Date
- Time
- ENEL's toll free number
- The name of the contract and the rate.

² Most of the general information and pictures can be found at http://www.enel.it/it-IT/reti/enel_distribuzione/qualita/progetti_contatore_elettronico/

A CONCISE ANALYSIS OF THE OLD AND THE NEW METERS³

A first glance at the old (electro-mechanical) meters and at the new Smart Meter (ill. 1a and 1b) immediately elicits a difference regarding their *plastic configuration* – the general configuration of the object's shape (Mattozzi 2010). The new meter (ill. 1b) is more homogeneous, i.e. displays less discontinuities among shapes, colours, materials, etc.; it basically displays one colour and one material and is an object with a single body and fewer shapes, and contrasts between shapes are developed gradually. The old meters (ill. 1a) are more heterogeneous: different colours, meter and switch are often two separate bodies,

³ Following the example of Akrich (1990), this analysis will focus on the way the Smart Meter articulates various users through its *script*. A complete analysis of the Smart Meter, which follows the model is presented in Mattozzi (2010), see Mattozzi (2008).

the meter contains many different juxtaposed shapes and is made of multiple materials (plastic, glass, metal).

Displaying only a few discontinuities, the Smart Meter's shell arranges, organises and hierarchises the user's actions. For instance, the frontal surface of the new meter has inscribed two kinds of actions: Looking and moving. These two actions affect two different senses, sight and touch, and thus two different parts of the user's body: The eyes and the hands. They also involve two different vectors: The one affecting sight goes from interior to exterior, while the one affecting touch goes from exterior to interior. The opposition between oval and circular shapes of the discontinuities is related to the opposition between sight and touch: The display, which shows data coming from the inside, is oval, while the button allowing the user to interact with the display by pressing it, in order to change the kind of information displayed, is circular. Further underscoring this argument, a third element on the upper part of the interface – on the right, just below the button – is made of an oval inside a circle. This is an optical interface for the exchange of data that affects both directions of the interaction (exterior-interior and vice-versa), which can be used only through a device that is both able to extract information from and add information to the meter. The lower zone of the interface – where the switch is – presents an element that combines the oval and the circular shapes. In fact, this is a zone, where both touch and sight can be performed. Here, the switch is accommodated; it must be moved through a bottom-up movement of the hand in order to turn on the meter and once moved – either up or down – it visually indicates, whether the meter is on or off.

Thus, the frontal surface is an actual interface and through its articulation, it outlines two users or, better *two model users*⁴ – users inscribed into the interface – who do not have to correspond to actual users, respectively:

- A *client-user*, who switches the meter on and off and who reads the display
- An *operator-user*, who uses the optical interface to insert and extract data with the right tool

⁴ Or *enunciatee* (see Graimas & Courtés 1979; and Eco 1979). Every time we will use the word *user*, we will imply the notion of *model user*.

The old, electromechanical meters also devised these two kinds of users, but they were articulated in a different way. Indeed, the operator-user, coming periodically to the house in order to read the display and communicate the consumption to the electric utility company, had to monitor both the meter and the customer: Each of them had to *function* correctly, the former had to measure electricity adequately and the latter could not hack the former (see also Akrich

1992, 216-219). The new meter does not need this kind of delegation to the operator-user and, indeed, it does not display any seal, which were formerly used as an indicator of possible user hacking. With the new meter, the operator practically disappears from the interactions: If everything works well, s/he should intervene only for the installation.

The actor referred to as the client-user emerges as a result of the combination of two other actors (fig. 1): the *contracting-user* and the *consumer-user*. These users are related to two different parts of the interface: The consumer-user relates to the display as the display makes it possible to extract information about consumption, whereas the contracting-user relates to the switch, since it is by switching on (or off) that this user accepts (or rejects) the contract (Akrich 1992, 216-219).

The *client-user* of the meter differs from the *customer*, who is the one that actually uses the energy and pays the bills. Contracting-user and consumer-user and hence the client-user, who contains the previous two, are actors that emerge only in relation to the meter, whereas the customer emerges from a broader relation with the electric utility company (fig. 1), which includes additional elements such as the contract, other documents and the consumption of electrical energy. Like the client-user related to the meter, the customer results from the articulation of two other actors: The *consumer-customer*, who is the actor, usually collective, that actually uses the energy, and the *signatory-customer*, who is the actor, usually singular, who signs the contract and is responsible for the payments (fig. 1).

5 According to ENEL (2003), *properly* means that the meter should allow the contract to be managed more easily and comfortably, and should also allow electric appliances to be managed more rationally by controlling the electrical consumption and by knowing, how much each device is consuming, i.e. by deploying a more aware consumption, thanks to the information displayed.

6 When within the home, the meter is often installed at the entrance and is somewhat hidden, e.g. in a niche. Despite the fact that the redesign of the meter aims also at making such a device a visible object, suited to be on display in a home, ENEL recommends to place new meters where the old meters were: in partially hidden places.

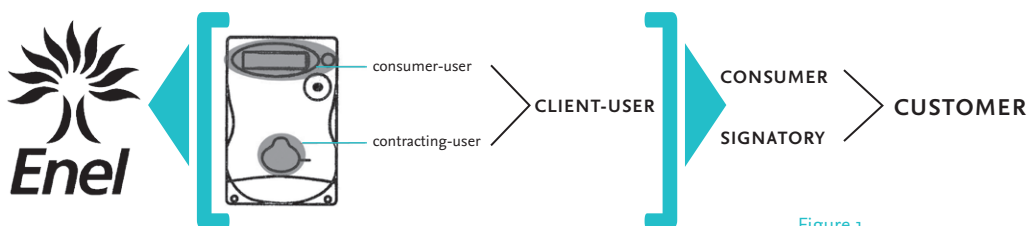


Figure 1

In order for the new meter to work properly⁵ all these actors should more or less superpose. This, however, does not happen because the meters are usually positioned at the ground floor of the building or even at the entrance of the basement;⁶ this means that almost no one can get into the position of the consumer-user, who monitors his/her consumption. The only time, when a customer gets in contact with the meter, is in fact, when the electric supply is cut and s/he has to switch the meter on again. Ironically, the only moment,

when the consumer-customer can be placed in the position of the consumer-user of the meter as well, is, when the energy supply is stopped and hence s/he is not actually consuming. Thus, since the customer interacts mainly with the meter, when it is switched off, in order to switch it on again, the customer basically interacts with the meter only as a contracting-user.

On the other hand, the Smart Meter identifies its user only through the contract number, the same one belonging to the signatory-customer, who does not necessarily correspond to the consumer-customer.

As we can see the Smart Meter neglects the consumers (fig. 2), be it a consumer-user of the meter, who is almost never actualised, or be it a consumer-customer who is not addressed at all by the meter. The meter addresses only the actors that have to do with the contract – and with the payments.

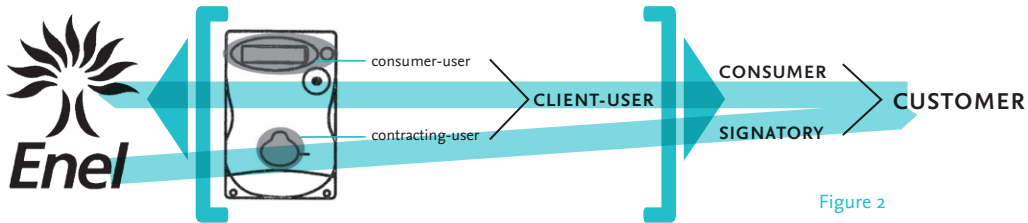


Figure 2

This articulation creates a gap between the consumer-customer and the contracting-user, which become visible, when, after a cut of the energy supply, the consumer-customer has to switch the meter on again and cannot see, which one belongs to him/her, unless s/he knows his/her account number. In order to fill this gap, without passing through the signatory customer, i.e. without reading the account number on the contract, consumer-customers write their family name, i.e. the actual name of the consumer-customer, on the meter (in ill. 1b, it is possible to see a name written on the meter).

There are two other factors that hamper the superposition of all the actors articulated through the Smart Meter, even if the device is installed within the home:

- 1) The information on the meter is displayed in watt, which makes it is very difficult to relate the displayed numbers to actual consumption (and actual cost); the old meter with its rotor disc, which would turn faster for higher consumption, would visualise much more clearly, at a first glance, if the energy being consumed was a lot or not.

2) Related to the first point there is the fact that consumption is a process, and the old meter, through its rotor disc, would display it as such, showing also the modulations of this process basically in real time; the new meter, instead, displays consumption as a fixed amount, registering it every two minutes, and showing it only when the consumer-user prompts the display by pushing the button.

All these elements show that with the Smart Meter, ENEL does not take consumption into account. It is basically interested only in the commercial transaction: The meter addresses only the signatory-customer, hampering the superposition of the different consumers actors, and in addition, it displays only fixed amounts of consumption, not the process of consumption. Fixed amounts refer to the past and can be calculated, eventually to be transformed into monetary value and be paid for.

Thus, the Smart Meter does not predispose the electric energy consumer to take into account his/her consumption either.

If we assume that within design, responsibility has to do with taking effects enacted by an artefact into account, we can see that by not taking consumption into account, ENEL and its Smart Meter act non-responsibly in relation to electric energy consumption according to the semiotic square (Greimas–Courtès 1979), which we have tentatively devised below (fig. 3):

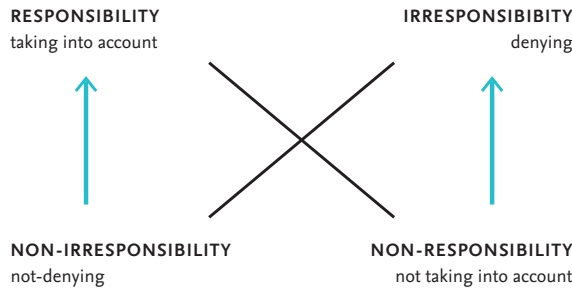


Figure 3

In the model, *responsibility* equals *taking effects into account*, whereas *irresponsibility* equals *denying any effect*.⁷

INTRODUCING ESPY

In order to remediate the non-responsible design of ENEL's Smart Meter, Simone Marian designed *Espy* (fig. 4 and 5), a device, which visualises households' electrical consumption.

Espy has been conceived as a visual funnel giving access to the electronic network within the walls. It has a plastic funnel-shaped

⁷ Clearly the way we consider *responsibility* is strictly related to design. Thus, our definition includes artefacts and differs substantially from the traditional one related to individual humans. Following the typology introduced by Luigi Pellizzoni (2004), we consider that an artefact can be considered to be responsible if its design – and more specifically its script (Akrich 1992; Akrich & Latour 1992; Jelsma 2003) – can anticipate some of the consequences of the its use.

shell in, which at the one end is a 7 cm diameter OLED screen and the other is an electric plug (fig. 4). The screen is covered by a slightly concave slide, which works as the only button of the device, thanks to a push micro-switch device.

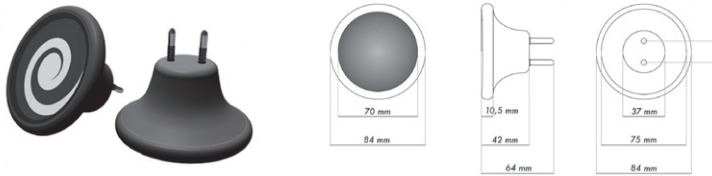


Figure 4

An integrated transformer allows Espy to be powered from the socket, into which is plugged, and thanks to a rechargeable battery, it can stay on even if unplugged and work, for instance, as an emergency light.

It contains a circuit card equipped with an Echelon chip (Long Talk Communication Protocol) in order to communicate with the ENEL's Smart Meter through the socket and acquire data about electrical consumption. These data are elaborated by the circuit card, which stores them on a fixed memory to eventually communicate them to users through the screen.

The screen visualises data in two ways: Through a graphic animation and through alphanumeric strings (fig. 5). The first one shows a rotating spiral.⁸ The speed of the rotation is modulated in relation to the electrical consumption; the higher the level of consumption, the faster the spiral rotates. The second one appears, when the screen is pressed. It shows data about consumption in kWh (kilowatt hour) with the monetary value for the total consumption and the monthly consumption as well as other information about the contract.

8 We chose the spiral together without considering its huge symbolic heritage. For us, it was important to have a configuration that would allow the re-presentation of the circular dynamic of the rotor-disc, would predispose the idea of something that goes into the walls and that was reversible – all at the same time. We think that each configuration acquires a value; first, in relation to its textual actualisation, and only later, in relation to the encyclopaedia of meanings it itself contains.



Figure 5

The screen usually stays in a standby mode, showing just a dot in the middle. Whenever electrical consumption exceeds a certain customisable amount, the screen starts displaying the spiral (fig. 5). A push

on the screen can change its status, from standby to spiral and from spiral to alphanumeric strings (fig. 5). The screen can also change colour according to the rate available. In case of household energy production and sale – through solar panels, for instance – Espy can show the different circulation of electrical current by switching the direction of the spiral's rotation.

Espy is also equipped with a small speaker, which warns the household's inhabitants of the eventual imminent cut of energy supply. Through a WiFi device, Espy can communicate with a router and exchange information through the Internet, so that a user can manage Espy and its information from a computer. The WiFi connection allows the use of Espy within Web 2.0 applications, in order to promote collective sustainable behaviours.

Installation of Espy is easy, it just needs to be plugged in and it will start to detect, elaborate and display data about the electrical consumption.⁹ Within Italian homes – and probably in other countries as well – Espy's *natural* habitat is the kitchen, which is usually the most attended room and where there are sockets at arm height.

ESPY AS A REMEDIATION OF A NON-RESPONSIBLE DESIGN

As we have seen, ENEL's Smart Meter does not effectively address the actors related to consumption, but only the ones related to the commercial transaction. In order to rearticulate the relations set by ENEL Smart Meter, so that it can take consumption into full account, we need a device, which fills the gap between the user of the meter and the electric energy costumer, and which predispose the superposition of all the actors.

By redoubling the display and the information of the Smart Meter and by moving them within the household Espy allows the superposition of the two consumer actors – the meter's user and the customer. Yet, we do not consider this remediation to be enough to take the household consumption fully into account.

Espy, however, does not only redouble and transfer the display, it actually remediates the way information is displayed by the Smart Meter. Indeed, Espy reintroduces, through the spiral animation, the analogical rotation of the old electro-mechanical meter's rotor disc, thus showing consumption as a continuous modulated process and not only as a series of fixed amounts. The latter can be visualised either in watt or in money – as a value unit, money is more understandable for the average user than watt.

⁹ The Echelon chip grants the communication with the Smart Meter. Nevertheless, it is a critical element of Espy's design that needs to be further developed. In any case, Espy has been conceived to integrate ENEL's *Telegestore* network and it cannot work in a traditional network. Through the same protocol, it would be able to communicate with domestic appliances.

There is yet another factor that helps to achieve a full remediation. Because of Espy's quite large display, the movement of the spiral – and hence the process of consumption – can be perceived from afar and by more than one user at once, possibly glancing from different points of view, and not necessarily focused on Espy.

These two features – display of the process and of the amount, multi-user perception – characterise Espy, making its use within the household substantially different from the use of ENEL's Smart Meter as well as setting it apart from other similar devices.

In recent years there has been a noteworthy flowering of devices (most of them still at the state of prototype or concept) to increase *energy awareness*, as stated by the tag line of the *Static!* research project of the Swedish Interactive Institute,¹⁰ within which quite few interesting devices have been designed. Beside *Static!*, we can mention *Wattcher* by Marcel Wanders, *EnergyJoule* by Ambient,¹¹ *Conscience* by Delroy Dennisur, *Coupe-Veille* and *Semaphore* by Gilles Belley, designed for Electricité de France (Badalucco & Chiapponi 2009). Among those, we can distinguish devices that account for a local consumption of energy and devices that account for the global energy consumption of a household, as *Espy* does. Within the first group, we find *PowerAwareCord* from *Static!* (see Palm-Löfstrom 2008) or *Coupe-Veille*, which both visualise, using colours or pattern, how much the appliances directly connected to the energy awareness device are consuming. Within the second, we can further distinguish those devices that visualise consumption quantitatively through digits or graphs, as *Wattcher* and *EnergyJoule*, and devices, which visualise consumption analogically through changing patterns, shapes or colours as the *FlowerLamp* from *Static!* does. Only *Espy* and *Conscience* mix analogical with digital visualisations.

Analogical visualisations are usually the only way to show consumption as a process that is clearly perceivable from afar¹² by more than one user, not necessarily focused on the display. These are also features of a visualisation system, which ease coordination and collaboration among actors. Indeed, it has been shown that visualisation systems are not only used to acquire information,¹³ but also to coordinate actions (Goodwin 1995) and achieve mutual understanding (Heath & Hindmarsh 2000). Nevertheless, the design of interactive systems is often based on the way Human-Computer Interaction conceive interaction, namely individually. Thus, such design addresses just one person even if it is not necessary or desirable. Such design actually hampers the emergence of coordination and collaboration among actors (Heath and vom Lehn 2008) – ENEL's Smart Meter does clearly so, and both *Wattcher* and *EnergyJoule* tend to do it.

10 See <http://www.tii.se/projects/static>. We thank Anna Thies for mentioning this research project to us.

11 For *Wattcher* see <http://www.wattcher.nl> and for *EnergyJoule* see <http://www.ambientdevices.com/products/what-is-ambient-the-only-commercialised-devices>.

12 Unless the display is very big, which is not suitable for a household.

13 Our analysis here rejoins approaches to behaviour change related to energy consumption based on practice (among others, Jegou, Libermann & Wallenborn 2009; Jelsma 2003; Ropke 2009; Shove 2003; Shove 2005; Shove 2010) and not on rational choice made possible by adequate information. All the approaches related to practice give, as we do, a central role to artefacts in disposing change.

If we consider that the consumer-customer, who contrary to all other actors articulated by the ENEL Smart Meter is a collective actor, emerging from all individual behaviours of a household's inhabitants, it becomes clear that managing the electric energy consumption requires coordination and collaboration.

Espy predisposes the emergence of this collective actor keen toward a common goal¹⁴ in two connected ways. First, because the singular behaviour of each household's inhabitant gets translated through Espy into a single process, which is objectified¹⁵ and made visible for the very same household's inhabitants, offering them self-reflection about their collective behaviour, and actually making them a visible collective actor (Latour 1994; Ueno 2000). In this way Espy, at the same time, takes into account consumption and predisposes the consumer-customer to take it into account as well. Secondly, because, by showing a process that can be seen from afar by more than one actor at once, not necessarily focused on Espy, the Espy allows effective coordination and mutual control.

Thus Espy completely rearticulates the ENEL Smart Meter's display, which even when within the home can be only looked at, when standing close to it and only by one user at time, who can only get information about the amount of energy already consumed in watt.

In semiotic terms Espy is a *sanctional artefact* (Greimas & Courtés 1979), i.e. an artefact, which takes into account, evaluates and judges the performance of a certain actor. ENEL's Smart Meter is also a sanctional artefact, but it works differently. Whereas Espy explicitly evaluates all the actions continuously, showing them as a singular process, the ENEL Smart Meter evaluates them implicitly – the display is empty if not prompted – except, when the amount of energy exceeds the limit and the energy supply is cut. Thus, ENEL's Smart Meter sanctions explicitly only negatively through a punishment, which usually arrives almost unexpected, because of lack of coordination, which the meter does not dispose. The ENEL Smart Meter behaves as a tyrant, who punishes virtually innocent people, who are not given the competences to behave correctly and hence do not feel responsible. Espy, on the other hand, is more democratic because it allows a distribution of control and hence a distribution of responsibilities.

14 In semiotic terms we have the emergence of an actant on the base of a unique *narrative program* – or *program of action* – which has the appearance of the collective actor constituted by the behaviours of the household inhabitants. Such a program can be related to the prevention of the energy supply cut, to saving money, lowering the electric consumption, lowering CO₂ emissions, or to a combination of the previous.

15 In semiotic terms *shifted out* (Akrich & Latour 1992) or *disengaged* (*debrayé*) (Greimas & Courtés 1979).

REFERENCES

Akrich, Madeleine (1990): De la sociologie des techniques à une sociologie des usages: l'impossible intégration du magnétoscope dans les réseaux câblés de première génération. *Technique et Culture* no. 16, 83-110.

Akrich, Madeleine (1992): The De-Scripton of Technical Objects. In Wiebe E. Bijker & John Law (eds.): *Shaping Technology / Building Society*. Cambridge, Mass.: MIT Press, 205-224.

Akrich, Madeleine & Bruno Latour (1992): A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. In Wiebe E. Bijker & John Law (eds.): *Shaping Technology / Building Society*. Cambridge, Mass.: MIT Press, 259-264.

Ambient (EnergyJoule) (2008): Ambient Devices (EnergyJoule).
Online: <http://www.ambientdevices.com/products/what-is-ambient>

Badalucco, Laura & Medardo Chiapponi (2009): *Energia e design. Innovazioni di prodotto per la sostenibilità energetica*. Roma: Carocci.

Cannatelli, Vincenzo (2003): Misurare le energie. *Technology Review Italia* no. 6, n.p.

Eco, Umberto (1979): *Lector in fabula*. Milan: Bompiani (English translation (1979): *The Role of the Reader*. Bloomington: Indiana University Press).

ENEL (2003): *Come utilizzare il contatore elettronico e scoprirne i vantaggi*. Rome: ENEL.

Goodwin, Charles (1995): Seeing in Depth. *Social Studies of Science* no. 25, 237-74.

Greimas, Algardis J. & Joseph Courtes (1979): *Sémiotique. Dictionnaire raisonné de la théorie du langage*. Paris : Hachette (English translation (1982): *Semiotics and Language. An Analytical Dictionary*. Bloomington: Indiana University Press).

Heath, Christian & Jon Hindmarsh (2000): Configuring Action in Objects. From Mutual Space to Media Space. *Media, Culture and Activity* vol. 7, no. 1-2, 81-104.

Heath, Christian & Dirk vom Lehn (2008): Enhancing Engagement in Science Centres and Museums. *Social Studies of Science* vol. 38, 63-91.

Hjelmslev, Louis (1943): *Omkring Sprogteoriens Grundlaeggelse*. København: Munksgaard (English Translation (1961): *Prolegomena to a Theory of Language*. Madison: University of Wisconsin Press).

Jegou, François, Joëlle Liberman & Grégoire Wallenborn (2009): Enlightening Collaborative Design Sessions of Objects Proposing Energy Saving Practices. In SwissDesignNetwork et al, (eds.): *Multiple Ways to Design Research*, 150-164.

Jelsma, Jaap (2003): Innovating for Sustainability: Involving Users, Politics and Technology. *Innovation. The European Journal of Social Science Research* vol. 16, no. 2, 103-116.

Krippendorff, Klaus (2006): *The Semantic Turn. A New Foundation for Design*. Boca Raton: CRC.

Latour, Bruno (1994): Une sociologie sans objet? Note théorique sur l'interobjectivité. *Sociologie du travail* vol. 36, no. 4., 587-607 (English translation (1996): On interobjectivity. *Mind, Culture and Activity* vol. 3, no. 4, 228-245),

Latour, Bruno (1999): *Politiques de la nature*. Paris: La Decouverte (English Translation (2004): *Politics of Nature*. Cambridge, Mass.: Harvard University Press).

Mattozzi, Alvise (2006): Introduction. In Alvise Mattozzi (ed.): *Il senso degli oggetti tecnici*. Roma: Meltemi, 7-49.

Mattozzi, Alvise (2008): Italy by Design. How to Transform a Monopoly into a Pluralistic Market through a Technological Innovation: The Case of the New Electric Meter. *The 4S/EASST Joint Conference*, 20-23 August, Erasmus Univerisity Rotterdam, Rotterdam.

Mattozzi, Alvise (2010): A model for the semiotic analysis of objects. In Susann Vihma & Toni-Matti Karjalainen (eds.): *Design Semiotics in Use*. Helsinki: Helsinki University of Art and Design Press, 40-68.

Palm, Jenny & Erica Löfstrom (2008): Domestication of new technology in household. *The 4S/EASST Joint Conference*, 20-23 August, Erasmus Univerisity Rotterdam, Rotterdam.

Pellizzoni, Luigi (2004): Responsibility and environmental governance. *Environmental Politics* vol. 13, no. 3, 541-565.

Perron, Paul & Frank Collins (eds., 1989): *Paris School Semiotics*. Amsterdam-New York: John Benjamins.

Røpke, Inge (2009): Theory of Practice – New Inspiration for Ecological Economic Studies on Consumption. *Ecological Economics* vol. 68, no. 10, 2490-2497.

Shove, Elizabeth (2003): *Comfort, Cleanliness and Convenience. The Social Organization of Normality*. Oxford & New York: Berg.

Shove, Elizabeth (2005): Changing Human Behaviour and Lifestyle: A Challenge for Sustainable Consumption? In Inge Røpke & Lucia A. Reisch (eds.): *Consumption – Perspectives from ecological economics*. Cheltenham: Elgar, 111-132.

Shove, Elizabeth (2010): Beyond the ABC: climate change policy and theories of social change. *Environment and Planning A* vol. 42, no. 6, 1273-1285.

Static! Research Project (2004-2006): Static! Online: <http://www.tii.se/static>.

Ueno, Naoki (2000): Ecologies of Inscription: Technologies of Making the Social Organization of Work and the Mass Production of Machines Parts Visible in Collaborative Activity. *Media, Culture and Activity* vol. 7, no. 1-2, 59-80.

Wattcher (2009): Wattchers. Online: <http://www.wattcher.nl>

ETHICS
IN
DESIGN

The Subtle Design
Revolution

Distribution of wealth
& Division of labour

FAIR TRADE
EXCHANGE

What is the responsibility
of education?

WE DON'T WANT
political
correctness
WE ~~WANT~~ ACTION

ETHICS IN DESIGN

It could be argued that responsibility is to take action on ethical principles. Ethics in design concerns a variety of aspects: Economy, safety, usability, social and cultural sensibility, sustainability and much, much more. Being responsible is a demanding task with many pitfalls. For designers and design researchers critical thinking is key, yet action speaks louder than words.

FUTURE

Earth

OVERGROUND

WE
NEED

TRANSPARENCY

CRITICAL
THINKING
IS



“

The project would

not be developed
for the end-users,
but **with the end-users...**

**from the moment of
idea generation.**

This allows the locals to
become the

subjects,

rather than the

of a social development programme,

where **the process**

of generating information

in addition becomes

**a source of
empowerment.**

”

Marie Louise Møllebæk Larsen
& Hanne Lindegard

The Use of Design Games in Third World Research

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INTRODUCTION

The use of design games has in recent years become a method for dialogical work practices and user-centred approaches in companies in Northern Europe. Interaction with the users is a relatively new practice and *intermediary elements* such as design games have been developed.

But is it possible to use the method outside companies in a very different context? What are the challenges, if we will use design games with stakeholders in third world settings? How should the design game be designed, planned and facilitated? What is the purpose and what is the output?

This paper will explore and reflect on how design games can be used both as a dialogue and as a co-designing process with local people in a street food project in India. Furthermore, it will show how the use of a design game can facilitate the development of socially responsible innovation by including a local community in the research and design activities, and hereby empowering the locals during the research, design and implementation phases.

The game has only been used in a limited number of sessions; however, it has generated enough feedback to be considered to be valid for future research conducted in third world settings.

BACKGROUND

Street food vending plays an important socio-economic role in today's India. It provides jobs for many low-income families. In Kolkata, West Bengal, approximately 130.000 street food vendors daily provide food for nearly 7.8 million people. Unfortunately, the business is threatened by urban development visions and claims that such vending constitutes a major source of health problems and diseases due to bad hygienic conditions and poor food preparation.



Illustration 1

InnoAid.org is a non-governmental organisation with an international outreach based in Copenhagen, Denmark, and established in January 2008 by a group of final year academic students, who wanted to take action on developing needs. Through cross-disciplinary teamwork, participatory methods, and knowledge sharing, InnoAid.org identifies local needs, co-create and implement user-oriented and sustainable solutions, where aid is needed. It is further the interest of the network to explore and develop new means of communication and to facilitate the participation of the locals. Members include both final year students and professionals within various areas of expertise e.g. engineering, design, marketing, public health, environment, ecology, medicine, finance and economics.

InnoAid.org initiated the Street Food Project with the objective to enable local, lower income, Indian entrepreneurs to serve healthy and hygienically prepared street food, by developing and introducing a set of open-source solutions within capacity development, infrastructure, education and product design.

Delhi, the capital of India, has recently taken action to combat the street food vendor's unhygienic conditions and to initiate so-called *beautification-strategies* of the urban areas. Solutions include state policies that illegalise cooking along the streets and promotion of mobile, commercial fast food, threatening the livelihood of the street food vendors and the lower income consumers that are depending on the cheap, available food along the streets.

The InnoAid.org Street Food Project takes on the responsibility of developing a range of solutions that address the official challenges, while at the same time ensuring and strengthening the livelihood of the street food vendors and their costumers.

The objective was to target the development of a relevant project at street food vendors, who should feel ownership of the created solutions and be able to implement them with current, available resources. The project would not be developed *for* the end-users, but *with* the end-users, participating not only at the moment of decision, but from the moment of idea generation. This allows the locals to become the subjects, rather than the objects of a social development programme, where the process of generating information in addition becomes a source of empowerment (Cross 1972; Rifkin & Pridmore 2001). The locals were thus given great responsibility in the design of new solutions through their inputs during all stages of the development. This process was facilitated by the holistic approach of the project team.

Following initial desk research by InnoAid.org, to tap into the current conditions, challenges and relevant stakeholders within the street food business, it was decided to undertake field research in Kolkata to understand local conditions and challenges from a local perspective. In January and March 2009, Marie Louise Møllebæk Larsen, Design & Innovation, Technical University of Denmark, Sandra Villumsen, Medicine, Faculty of Health Science, University of Copenhagen, Denmark and Elena Guravova, International Economics and Development, Fresno Pacific University, California, USA, undertook local research activities in collaboration with local organisations, workers unions, consumers and street food vendors.

DOING INITIAL FIELD WORK

The unhygienic conditions, potential negative health impact and the socio-economic importance of street food vending in West Bengal are well documented by national and international organisations and institutions (Chakravarty & Canet 1996). However, the local research showed that only limited actions have been taken, and improvements are yet to become visible along the streets of Kolkata.

Issues of society, documented worldwide, are not always the priority and concern of local authorities, nor are they necessarily translated into the expected type of solution. Local perceptions on how proper hygiene is practiced and visible can differ much from international standards and guidelines due to e.g. socio-economic and cultural factors. Through the dialogue and design game with consumers of street food it was discovered that many found it

important that the food was covered, when being displayed, while the vendors poor hand hygiene was not seen as a problem; rather it was perceived as one of the reasons for the vendors flavorful food.

Fieldwork was initiated in order to address public challenges, on a local basis, to identify and create relations to relevant stakeholders, and to get an understanding of the street food challenges seen from the local stakeholders' perspective.

Following two months of literature study, relevant stakeholders and challenges related to the street food business was identified by conducting a range of observations, video recordings, informal interviews, and tapping into existing networks by *rolling the snowball*, on the streets of Kolkata in January 2009. By rolling the snowball relevant stakeholders were not only identified, important local relations were furthermore created on multiple social levels, to be used for later work (Bijker 1995). By *following the actors*, observational studies of the everyday practices of street food vendors and consumers were made (Bijker 1995).

The identified relevant stakeholders – their culture, network, life and challenges – influenced the choices and the design of the further research and research tools.



Illustration 2

CHOICE OF DESIGN GAME AS RESEARCH TOOL

Committed local participation can be a challenge, when conducting research in a development country with people, who have a low literacy level, as well as limited understanding and experience with research, and, in this case, have limited time for other activities besides their income generating endeavours. The locals can often loose focus and interest during interviews, when the interaction becomes monotone or unilateral. In addition, many locals are not used to being questioned intensively.

Research methods that include visual materials such as diagramming and mapping activities used in development work, where

the subjects are more actively involved tend to have great participation by the locals (Mikkelsen 2005). Similarly, the use of design games can enable the researcher to shift from solely verbal interaction to a combination between the visual and the verbal. This facilitates a more open dialogue and process, and makes the output more powerful (Mikkelsen 2005).

The choice of a board game as research tool, and choice of interaction, was made based upon the achieved knowledge on the busy life of the vendors and their surroundings, their limited educational level and experience with questionnaires, and furthermore, by observing how the locals interacted through participatory sessions along the streets already.

The type of design game was inspired by the use of existing urban street games e.g. playing cards and board games, identified during the initial field observations. The content of the design game was based upon the identified challenges, the local culture and educational level of the vendors.

DESIGNING THE DESIGN GAME

Mistrust in the use of information and experience with the lack of solutions implemented, at the place of initial research, could affect the locals' willingness and interest in participating in later research. To combat this challenge the project team set their focus on developing research activities that could bring value for the participants during the research process. This was done by including educational aspects at the stage of research in such way that the locals participating would generate relevant knowledge and empowerment throughout the process.

The use of the design game was intended to give the project team a better understanding of how street food related issues are visualised, perceived and valued by the main stakeholders – the consumers and the street vendors – while at the same time giving the participants basic education and awareness on hygiene aspects of the street food.

The design game was developed to be used as a *boundary object* (Star & Griesemer 1989) or *intermediary* (Callon 1987) between two different networks – the Non Governmental Organisations (NGOs) and the local street food stakeholders. The game acted as a *non-human actor* with a *double purpose*: To bring new knowledge to the stakeholders about hygiene and health, and to bring a tool to explore, how street food vendors could improve their livelihood through improved marketing, focusing on the costumers needs and vendors values.

The game made it possible to structure the session by setting boundaries through a set of rules, while at the same time generating valuable, qualitative insight on individual's priorities and perceptions of hygiene, to be used for further assessments.

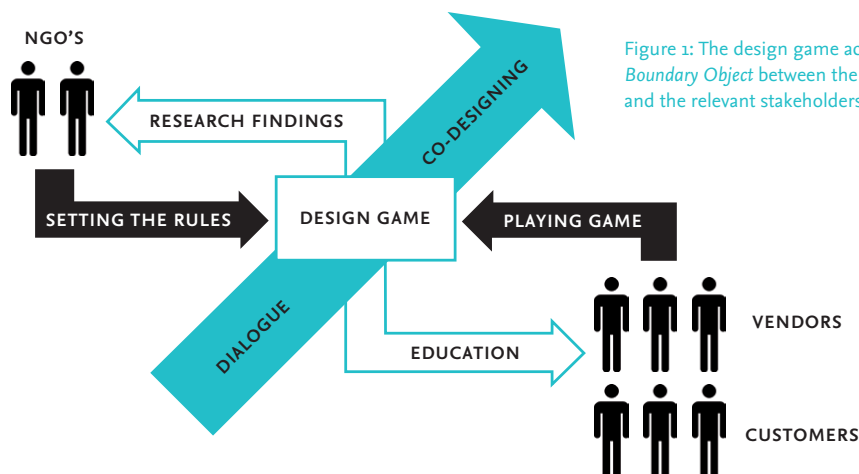


Figure 1: The design game acted as a Boundary Object between the NGOs and the relevant stakeholders.

Qualitative methods are designed to help researchers to find out, how individuals or groups look at the world around them, and to help create a deeper understanding of what people think. They can also help identify local concerns, opinions and beliefs and provide detailed information on important issues (Rifkin and Pridmore 2001).

The design game was designed to identify reasons for not buying street food at a specific vendor and capture, how these reasons are prioritised, giving indications of which aspects are or are perceived to be decisive, when locals select and purchase street food. It was chosen to take and present negative aspects related to hygiene, as to the assumption that costumers would be more likely to remember negative experiences and furthermore that a negative approach as opposed to a positive would provoke and facilitate consumers and vendors to share more opinions and elaborate discussions.

Since the game was to be played on site – on the ground, along the streets, at very small and busy places, and the participants would be lower income locals, with high rates of illiteracy, limited time for new activities as well as many them would be immigrants from both Bangladesh and the surrounding states – the game needed to be very flexible in its design and to use very simple rules.

THE RULES OF THE GAME

The research activities are given structure and a driving force by setting up a game with rules (Brandt 2004). The design game had a very open, participatory approach, emphasising the participation of the contestants and that, though some rules were set to activate and stimulate the activities, there was no preconceived interest in specific findings or any *right* or *wrong* results of the game. Both costumers and street food vendors were selected to play the design game to get an understanding of, whether they prioritise various aspects of the street food differently. Vendors and costumers were involved independently with the intention to get both views, unaffected by the presence of the other. It would be of interest in further research to assess, whether common games with different stakeholders would trigger open discussions and disagreements that could result in more elaborate arguments of their priorities.

The costumers were introduced to the game and told to see themselves in the following scenario: “Imagine you have visited 15 street food vendors and bought street food to eat at each place. At each place you had a bad experience, represented by one of the game bricks.”

The experiences/game bricks were then explained and the costumer was requested to rank the game bricks according to which experiences that would most keep him or her from eating at the street food vendors again. The game bricks placed on top of the game board represented the experiences, which was the worst according to the costumer, and would most likely keep him or her from coming there again, while the game bricks placed low on the board were the ones of least concern.

The street food vendors were presented with a different scenario: “Imagine a given street food vendor has problems with his business and costumers do not want to buy his food. What would you say were the aspects, which could have the most negative influence on the costumers? Which aspects would keep costumers the most away from his business?” Taking the example of a random vendor avoided bringing any negative impression on the vendors own business, though his or her prioritising would still be based on his or her own experiences.

It was important for the quality of the design game to only inform the game participants very briefly about the InnoAid.org Street Food Project and its objectives. From the researchers’ experiences with research in West Africa, the locals tend to try and please the researcher by having focus on his or her specific objectives. If these are known from the beginning, it can affect the quality of the output and feedback from the participants.

THE GAME BRICKS

Game pieces used in the design games allow stakeholders to become more fluent in the language of expressing design moves (Brandt 2004).

Based upon the literature and the initial field work on street food and Indian culture, 16 negative aspects and experiences of street food were identified in collaboration with a Danish and Indian NGO: No flavour, no water, dirty kitchen, vendor dirty, dirty water, raw meat, far away, old food, expensive food, fat food, angry vendor, much trash around, many flies, slow service, got sick, bad taste.



Illustration 3

The negative statements were related to different aspects such as economy, time, hygiene, health, social relations, etc., which were realistic themes in the context, where the game would be played. The Indian NGO recommended that the statement “no flavour” was included in the game based on his own experience with Indian street food; mostly it is full of flavour and the opposite could keep people from buying it. Empirical data further supported the fact that street food is popular due to its great flavours and diversity. Bad hygiene was mentioned indirectly by stating visual scenarios such as dirty water, many flies, got sick, etc. The intention was to stimulate a conversation about what hygiene is and how it is visual for the consumer, by initially giving the participant specific aspects to prioritise.

The negative statements were translated into local language, Bengali, so the game bricks had one side in English and one side in Bengali. Each game brick had a larger picture to emphasise the visual interaction, and to support the meaning of the written statement to enable illiterate people to understand the statement of each brick. Selecting the pictures was an iterative process in collaboration with the Danish and Indian NGO, in order to select pictures

that would be representative for the specific context, such as finding pictures with Indian people and an urban context similar to Kolkata that could be understood locally. One game brick was commonly misunderstood. *Got sick* was visualised by an image of a girl with her head in a toilet. Multiple times the local participants interpreted this game brick to represent a girl washing her face. It was suggested that the game brick should include a picture of a person vomiting in the street, as people rarely have access to a toilet to vomit in.

It was important that the game bricks were durable, easy to make and large enough, so the text and picture was easy to read and see. Bricks were made in 5.4 x 5.4 cm, 8-sided, in high density cardboard.

THE GAME BOARD

Initially no game board was used in order to make the game more flexible and fit the specific places where it would be played. However, during some initial trial games, the experience was that the local participants needed a set structure to understand how and where to place the bricks. A game board was then added to create some structure and overview for the participant, who had difficulties arranging the bricks without the board. The game board also supported the qualitative data collection by setting a standard frame for the findings/output. It should be noted that the outcome of a game with a game board will be different than a game, where the participant has a free choice to arrange the bricks. As a facilitator it is important to know, which direction to take the game but also to be open and flexible by preparing a number of different game frameworks to be used in the situational practice. One framework in one situation may be more suitable than another, for example in relation to the available space to arrange the game bricks or to allow for room for the participants different understandings on how to rank and value.

The game board was made in paper with the width of two bricks and the height of 8 bricks. An outline was made for 15 bricks to define, where the bricks were to be placed on the paper. Along the length of the game board a scale was made. An angry smiley face on the top and a smiling smiley face on the bottom indicated, how negative the aspects were considered, when placed at a given position on the board. A local NGO recognised the smiley symbols from an earlier survey, and the meaning of smiley faces was generally understood among the locals.

THE CONTEXT

Playing a design game is an activity that often takes place around a table, in a meeting room or a creative project room at the place of research. The different choice of context and approach to reach the locals in their own environment set high requirements to the design and the complexity of the game.

The game was played on the ground, on the top of a rickshaw, at a highway junction, at the street food path, in a local restaurant, and in a regular office. In other words, it was played, where the relevant stakeholders could be approached.

Playing the game in the open environment, meeting the vendors close to their stalls provided a challenging setting as the game very quickly created crowds due to the interest of people passing by and by other interested vendors. The participant was affected by the attention from all the surrounding people. Women, especially, were affected, because they are not used to taking the lead and being at the centre of attention.

Being close to the vendors' stands gave inspiration as well as clear and supporting references for the vendors to explain the results and make additional comments. The surroundings became part of the explanations by showing, pointing at and relating the comments to the surrounding features or issues. The additional feedback and local references was documented by recording video, taking pictures and writing notes, which were collected in a qualitative research diary. This made it possible to later share the learning from the design game to develop solutions. It proved to be valuable

Illustration 4



for the dialogue to give the participant time and flexibility to pause the evaluation of the bricks, to i.e. show a specific feature at a nearby kiosk or to share personal experiences.

LOCAL PARTICIPATION IN RESEARCH GAMES

The design game had primarily focused on the understanding of individuals and not initially on the interaction between different social units, thus the game was played either with a single person or a maximum of six vendors or costumers.

Playing with a single person created some initial intimacy, giving the participant time and room for expressing his or her own views throughout the game. Playing the game at public places, at a food path, a local festival or at the vendors' streets in the centre of Kolkata, attracted crowds due to our presence as foreigners as well as the fact that the game created more open dynamics and dialogue.

People, joining in to have a look, had an immediate interest in knowing what was going on and very quickly wanted to interfere in the game and the participant's way of playing and their choice of prioritising. Women participating created more attention, and it was a challenge to get their views and priorities without the surrounding men interfering with their own views on how to play the game. As noted earlier, women in India are not used to being included as opinion leaders.

Having only one player at a time limited the verbal, continuous reasoning of his or her priorities during the game as this would require the player to think out loud. This requires the game facilitator or translator to be good at motivating the player to think out loud or stimulate the player to share his or her thoughts throughout the game. In the research, it was found that a dynamic and open session was created, when involving a female, who had already participated in one game, to act as facilitator of other games with females from the same area.

Having several people playing the same game at the same time can contribute to dynamic discussions, which can be captured by the translator/facilitator, when the group tries to come to an agreement. The group dynamic can bring up aspects, which would not be considered or included if the player was not stimulated by others' opinions. When selecting the group, participants should be picked carefully. It can be a strategy to include participants with very different backgrounds and interests to provoke disagreements and discussions. In India, however, gender and cast issues are still part of the Indian society, and it is not necessarily fruitful and right to have groups playing, where participants are of very different social

status. In some group games, it was observed that there was a very clear internal perception of who spoke and who did not, making it difficult to get feedback from lower class people.

The objective of the design game was to provoke differences in street food priorities among different groups, to see if any existed, so most games were done with very similar groups of stakeholders.

USE OF TRANSLATOR

The official spoken language in Kolkata, West Bengal, is Bengali, however, many vendors originate from other states of India. Besides Bengali, a translator furthermore had to speak the more widely known Indian language: Hindi.

During the fieldwork it was experienced that the use of translator possessed one of the greatest challenges to the quality of the research output. It was crucial for the translator to understand the content of the game, how to present the game, inform about the rules and how to support the participants and get the valid information, while passing it on without putting his or her own opinions into the feedback.

Earlier attention on the rights of the vendors brought international NGOs and local organisations to the streets of Kolkata to conduct various forms of research. According to the vendors, no real feedback was given after the research, and thus, the vendors had become sceptical of participating in new research. They were concerned with the information, where it would go and if it would ever benefit their own businesses.

Working with a former vendors' union leader in Kolkata provided us with easy and good access to the street vendors as many street vendors are organised in vendors' unions to avoid, and fight against, the harassment by the local authorities, who daily claim money or food from these informal businesses.

Although we managed to get access to the vendors by approaching one of the vendors' unions first, there were limitations to the common understanding of how to conduct research. It was often experienced that feedback was transformed by the former union leaders' own opinions and perceptions of how the vendor or costumer had prioritised the aspects. Therefore, emphasis was put on explaining the importance and methodology of the research to the former union leader. On the more positive side, the use of a former union leader as translator and point of contact gave us a lot of information on how the leaders and official representatives of the street vendors perceive the situation and prioritise various street food experiences.

In the southern part of West Bengal, Sunderbans, the design game was used for research in multiple rural villages with relevant stakeholders. Here, we had the privilege to meet a Danish PhD student, who was doing research on environmental hygiene, spoke the local language fluently and could support our work as translator, and a health educator from a local NGO, who acted as the game facilitator. In this setting, we managed to create a less formal scene, where we were only observers in the background, after some initial training of the game translator and facilitator.

The PhD students' understanding of the research methodology gave us a lot of feedback on the local discussions during the game, how our questions were translated to give meaning locally and with what level of confidence the locals answered our questions. This provided valid and very useful information, which local translators not necessarily know the importance of sharing.

The health educator, taking the role as game facilitator, had a lot of interest in using a similar method for his own work, educating the locals about health. In his experience, the design game made it easier to anticipate and engage participation than the more traditional method of working purely with posters and debate forums.

FINDINGS AND REFLECTIONS

The first obstacle to the use of the design game was how to approach the locals. An optimal situation, it would seem, would be to have a local game facilitator with a good understanding of the research methodology, how to control and not control the game, and who could act as a translator during the game. With such a setting, the game could be video recorded and used for later assessment by the international research group. Foreign involvement and too many game facilitators can make a game participant nervous and too conscious of what he or she says and does. Although international presence and involvement can create a formal setting, one should keep in mind that a foreign facilitator sometimes also can make the scene more informal than a local facilitator, who have, and furthermore uses, his or her authority or social status during the game.

Although we gained access to the local vendors, it was, and has been, the experience in earlier research that it can be a challenge to approach the lower class vendors and especially women. The former union leader and NGOs, who helped us with the initial introduction, had their own interest in introducing the local leaders and opinion makers. To some extent they assisted our research, but their involvement also made it a challenge to approach the ones most in need of help.

The design game was quite simple in its content and play, and yet we experienced that it provided an proper level of complexity, when played. The participants had limited experience with such games and therefore needed time to understand the concept of the design game. The very narrow focus, quite concrete issues and simple rules enabled the locals to understand the game and facilitated discussions and opinions. A higher level of complexity and abstraction could have limited the participants ability to express themselves.

The design game did not only give us an idea of how costumers and vendors prioritise different aspects of the street food business, it furthermore gave the participants knowledge about what to look for, when preparing or buying food along the streets. Thus, the game brought new knowledge to both facilitator/researcher and participants.

Interviews, workshops and questionnaires can trigger some discussions among the local participants, which takes the form of very specific, everyday life issues. This may have little relevance for the session and can take to much time, due to the individual interest of the locals and their limited knowledge of the extent of the research. The design game made it possible to structure the session with a set of rules, providing boundaries that stipulated more focus from the participants' side and making them in charge of the session.

The importance and interest in the game was seen through the time spend on the game; it took approximately for 15 minutes participants to place the game bricks. The iterative process of replacing bricks during the game, gave further feedback on the play, which was welcomed and taken serious by the local participants.

The results from the design game still need further assessment, though initial analysis indicates that both the costumers and vendors think that visible hygienic aspects, such as many flies, vendors having dirty hands and dirty water, would impact the business more negatively than the food being a bit more expensive and a little further away. An interesting comment seemed to come from various costumers, stating that they would be interested in investing a little more money and going a bit further for more healthy and hygienic street food, however, this not is an option at the moment as "all vendors are all filthy".

Costumers valued the vendors behaviour as a much more important factor to their purchase than the vendors thought it would be. The differentiation of perceived value of behaviour became one aspect that was later addressed in an educational program to make vendors aware of the consumers' value of his or her behaviour when interacting with the consumers.

After the final prioritising, the participants were asked to come up with any negative aspects, which were not mentioned in the game, and which would affect their choice of street vending businesses. Multiple aspects were mentioned, once again stating the involvement and interest of the participant in the game. It furthermore gave the participants a feeling of their opinions being valued and of used for further research, which could be of benefit to themselves in the end. Aspects suggested from both the costumer and vendors side: Close to traffic, food not covered, dogs' access to the food, the vendor is sick, the vendor sweats, vendor has wounds on his hands, no soap visible, smells from the surroundings, shops near by are filthy and dirty, dining area is dirty, serving plates and eating tools are dirty.

Only few earlier projects similar to InnoAid.org's Street Food Project had succeeded. It seems the reason for the low success rate would be the neglect of the end users, the vendors and consumers, throughout the design and development. Thus, a project concept with the right approach and team behind it cannot only succeed, but will most likely have a great impact and scale-ability in both urban cities and rural townships. The Street Food Project have met much enthusiasm at the local level as we value their opinions and needs, keeping in mind that we also need to address other stakeholders' needs and interests. The enthusiasm, involvement, time spend, discussions and new ideas that came from the local participants when playing the design game, brought much attention to our own research methodology and have given inspiration to both Danish and local NGOs.

Implementing solutions, which require effort, time, purchase of new technologies or other resources from the vendors' side, must seek to positively impact the marketing value of their businesses to make sure that the efforts contribute to the vendor's livelihood. Thus, an appropriate solution for the vendors of the West Bengal has to take into account both international and local hygienic practices and recommendations, and implement the improvements by including and emphasising aspects of the project, which have value for both the vendors and the costumers of street food.

FUTURE AND ON-GOING WORK

Following the design game, two co-designing workshops were held with select groups of vendors in Kolkata. The project team emphasised their role as designers of the tools and methods for the locals to encourage them to express themselves creatively (*Sanders and*

Stappers 2008). The objective was to generate initial design-requirements and ideas to the physical conditions and place of cooking.

Throughout the initial fieldwork, it was important for the project team to be able to collect the observations, output and findings in a format that could be shared and used by others as well as contribute with critical comments on the collected information.

The Street Food project is managed and facilitated by InnoAid.org in collaboration with a local partner organisation. The driving force of the project, however, are students within various disciplines, who have been invited in to explore the possibility of developing project solutions for vendors and their consumers with the support from their educational faculties and as part of their education. Based on local insight and a close collaboration with the vendors, four students from Design & Innovation at the Technical University of Denmark have developed a modular kiosk system to facilitate hygienic practices that is adaptable to meet the individual needs and resources available, and an environmental engineer and two hygiene and sanitation students have undertaken local research to collect data and co-create new solutions with focus on hygiene and waste management. In January 2011, a project proposal by InnoAid.org was approved by the Danish International Development Agency (Danida) under the Danish Ministry of Foreign Affairs to undertake local participatory workshops through three local partner organisations to develop and finalise workshop material on how to sustain and improve the livelihood of the vendors in Kolkata.

REFERENCES

- Bijker, Wiebe E. (1995):** *Of Bicycles, Bakelites, and Bulbs. Toward a Theory of Sociotechnical Change*. Cambridge, Mass.: The MIT Press.
- Brandt, Eva & Jörn Messeter (2004):** Facilitating Collaboration through Design games. *Participatory Design Conference 2004*, 27-31 July, University of Toronto, Toronto.
- Brandt, Eva (2006):** Designing Exploratory Design Games: A framework for participation in participatory design? *Participatory Design Conference 2006*, 31 July-5 August 2006, University of Trento, Trento.
- Callon, Michel (1987):** Society in the Making: The Study of Technology as a Tool for Sociological Analysis. In Wiebe E. Bijker et al. (eds.): *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge, Mass.: The MIT Press, 83-103.
- Cross, Nigel (1972):** *Design Participation*. London: Academy Editions.
- Chakravarty, Indira & Colette Canet (1996):** Street foods in Calcutta. *Food, Nutrition and Agriculture*, no. 17-18 (published by FAO of the UN), n.p.
Online: <http://www.fao.org/docrep/W3699T/w3699to6.htm#TopOfPage>
- InnoAid.org (2008):** InnoAid.org. Online: <http://www.innoaid.org>
- Mikkelsen, Britha (2005 (2nd edition, 1995):** *Methods for Development Work and Research. A new Guide for Practitioners*. London: Sage Publications.
- Rifkin, Susan B. & Pat Pridmore (2001):** *Partners in Planning. Information, Participation and Empowerment*. London: Macmillan Education.
- Sanders, Elizabeth & Pieter Jan Stappers (2008):** Co-creation and the new landscapes of design. *CoDesign: International Journal of CoCreation in Design and the Arts* vol. 4, no. 1, 5-18
- Star, S. L. & J. R. Griesemer (1999 (1989)):** Institutional Ecology, 'Translations,' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-1939. Reprinted in Mario Biagioli (ed.): *The Science Studies Reader*. New York: Routledge, 505-524.



DESIGN RESPONSIBILITY (RE-)COLLECTION

The tagwall created at the workshop was used throughout the seminar and acted as a collective memory for the participants. A few notes and ideas were added, but mostly the tagwall was used as a common point of reference to identify recurrent themes, recall earlier discussions or to underline an argument. To that extent the tagwall served to collect, reflect and communicate the involvement and contributions of the seminar participants.

A background image showing a person from behind, sitting at a desk and looking at a computer screen. The desk is covered with various sticky notes and papers. The image is overlaid with a teal gradient.

“When
people feel truly involved,
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political perspective
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From a democratic point of view,

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to become more
responsive and
responsible.”

Arild Berg

Innovation by Participatory Design – A material based art project in mental health care

ARILD BERG

Arild Berg is an Artist Researcher. He holds an MFA in ceramic arts and works as an Associate Professor in product design at Oslo and Akershus University College of Applied Science in Norway. Currently, a PhD student at the School of Visual Culture, Aalto University, in Finland, he is finishing a dissertation on user participation in material based art.

INTRODUCTION

New qualities rise from participatory design. Experiences from architecture exemplify this. When residents are invited to participate in the process of building of their own houses, new qualities are developed, such as human scale, diversity within an overall order and use of natural, sustainable materials. This does something for the people involved; they grow self-confidence by working with authorities, professionals and one another (*Blundell Jones, Petrescu & Till 2005, 75*). Participatory design has a great potential to empower users to influence their own future surroundings. Presenting a case on how art objects were developed through participatory process in a mental health care unit for elderly patients, this article will illustrate both potentials and pitfalls in this approach.¹

Principles and practices of participatory design vary. The methods have been developed from social learning theories in relation to organisational change (*Schuler & Namioka 1993*). The ideal in one approach was to involve workers in change processes. This model from the 1970s is often referred to as *the Scandinavian approach*. From being a union oriented approach in the industry work place, it has predominantly turned into a user-oriented research approach in human-computer interface.

However, there are new ideas rising in other arenas of participatory design. Some researchers explore the concept and meaning of participatory design, and suggest to keep the name, but ques-

¹ I am grateful to my co-researchers in the project: Mette Holme Ingeberg, Psychiatric Nurse and Associate Professor, and Brit-Maj Wikström, Professor/PhD in Psycho-Social Medicine, both at the Faculty of Nursing, Akershus University College. Further thanks are due to the representatives from Akershus University Hospital for their collaboration. The Regional Committees for Medical Research Ethics (REK) at the University of Oslo approved the project and Norwegian Social Science Data Services (NSD) at the University of Bergen recommended the project.

tion the meaning (Blundell Jones, Petrescu & Till 2005, X). Others require more pragmatic, political demands on participation in public space; demands related to universal design and democratic values in public spaces. Working in a public space involves many people. An interplay between the creator, the client and the users includes risks and uncertainty, before concepts of consensus are developed (Blundell Jones Petrescu & Till 2005, X). Although not everyone can make their imprint on the final product, an inclusive process raises the sense of

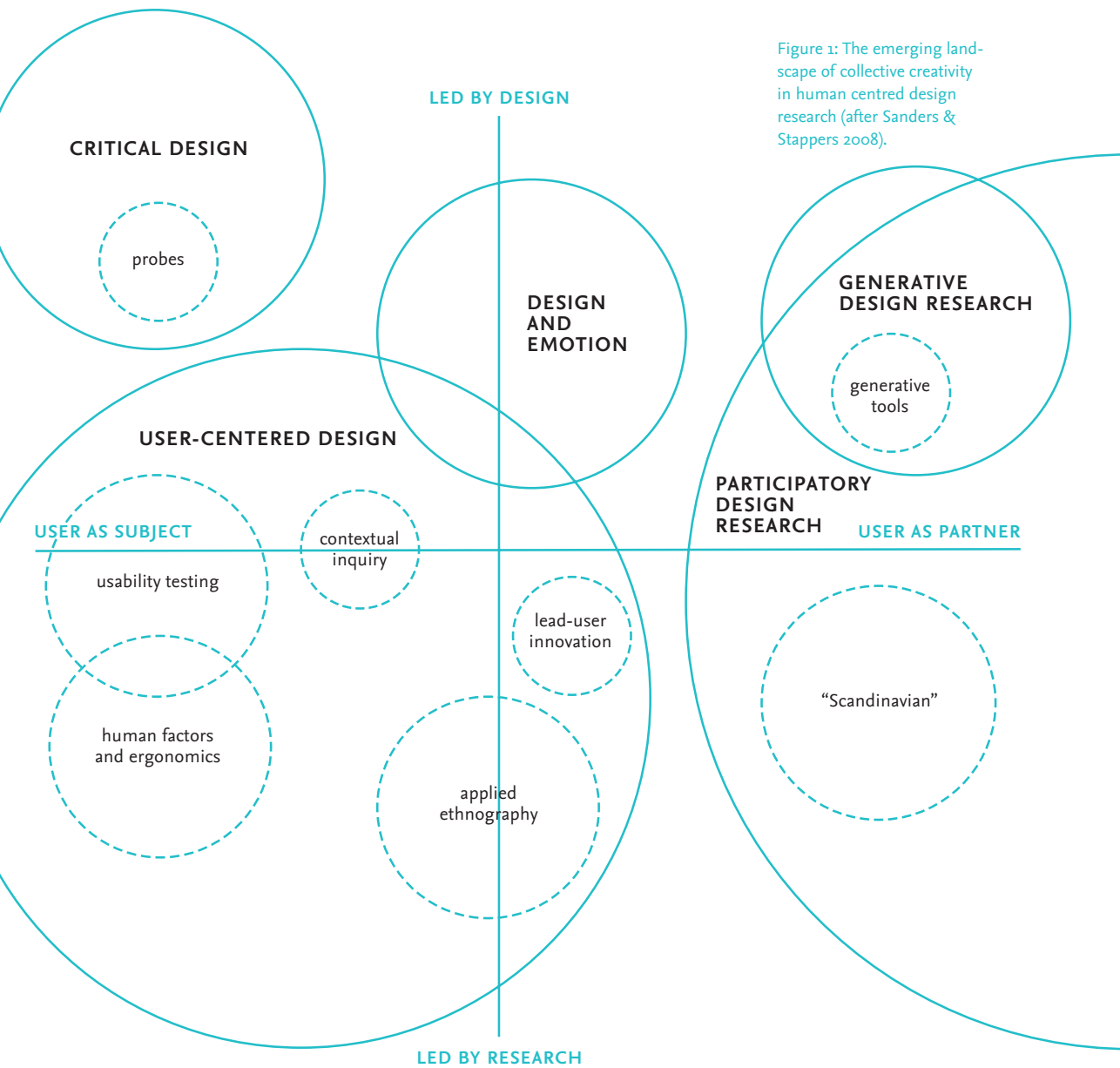


Figure 1: The emerging landscape of collective creativity in human centred design research (after Sanders & Stappers 2008).

belonging, which reflects true participation (Blundell Jones, Petrescu & Till 2005, XIV). When people feel truly involved, it reflects a political perspective on design practice. From a democratic point of view, it is a challenge for designers to become more responsive and responsible.

There are nevertheless pitfalls for participatory design. If the degree of participation is reduced to merely visual participation, then the potential is not fully unfolded, and the people involved are reduced to be passive consumers in contrast to active doers. People seen as passive consumers fixate a superficial and transient image of design, losing sight of the transformative potential (Blundell Jones, Petrescu & Till 2005, XV). Participatory design can release new creative processes, which establishes an expanded field for design practice. An expanded practice does not only include a transformation for the users, but also for designers (Blundell Jones, Petrescu & Till 2005, XVI).

Elizabeth Sanders and Pieter Jan Stappers have visualised a landscape of the participatory design field (fig. 1). Different traditions in practice are grouped together and in relation to on another (Sanders & Stappers 2008). Their overall understanding of different approaches in participatory design and co-creation is referred to as *any act of collective creativity*. They put architecture in front as a good example of where new design practices are developing, specifically concerning healthcare environments. These new practices represent just a few examples of a growing new human centred design research landscape. Sanders and Stappers recommend researchers to develop a multitude of different approaches in this sector.

Even though collective creativity signifies the new landscape of human centred design research, little of this research has been done among the growing population of elderly people in mental health care. A new approach in this emerging landscape of design seems to be the use of material based art in mental health care for elderly people. This paper presents such a case study, which centres on a public art project in a Norwegian hospital. Although some practices of art might differ from a collective process, this case had many processes similar to participatory design. It was a site-specific, creative process and the outcome were objects of art. These were meant to generate a variety of expected experiences for the users. The users were involved during the conceptualisation, materialisation and implementation of the art. Practical examples demonstrated the qualities that a material based art approach can contribute to in participatory design.

Art can also provide new dimensions to a product design process. Art creates reflection, it regenerates intangible qualities, such as thought and reflection, including complexities and contradictions (Blundell Jones, Petrescu & Till 2005). Sometimes the product is not

the most important outcome; the process of creativity itself regenerates communities. A hospital community exemplifies the fragility of an individual, who meets the robustness of policy. In art projects, most people feel less peculiar, and thus a lot more empowered (*Blundell Jones, Petrescu & Till 2005*). These are themes relevant both in art and across the design profession.

Researchers in participatory design suggest developing knowledge on how a more attentive exploration of creative participation can be done with a pluralistic and inclusive basis (*Blundell Jones, Petrescu & Till 2005, 22*). This has been explored in my case study of a material based art project in a hospital. The case findings contribute to the understanding of participatory design, and to the development of a new conception of design qualities.

SIX SOURCES OF EVIDENCE

The research approach is as mentioned case study. Using case studies can be a way to develop an understanding of emerging theories in participatory design and co-design. The scope of my case is a participatory process that led to communicative objects of art. During the all stages of the process, data has been collected, using different methods, and stored in a case study protocol (*cf. Yin 2003, 69*). This method makes up six sources of evidence: Participant observations, direct observations, documentation, archival records, physical artefacts and interviews (*cf. Yin 2003, 85*).

Participant observation is used as one approach. From an ethical perspective, the researcher should present his or her intentions in the case, his or her background and be clear about the role as a researcher (*Skjervheim 1996*). I am a material based artist, and as such I am doing participant observation from *the inside* of the collective production of objects. The collective production is here understood as the conceptualisation (with the nurses), the materialisation (in the ceramic studio) and the implementation of the art objects (in the hospital).

Direct observations are a range of data sources from formal to casual data collection activities, observational protocols and analysis of the conditions of the buildings with photographs. Due to the dominance of visual phenomena in the process, it seemed natural to me to do a thorough visual documentation in diverse stages of the process. These stages are related to the technical process, interpersonal dialogue, ideas about metaphors and the architectonical

context. The observation methods are based on *Image based research* (Prosser 1998), and consist of photo documentation, drawings, sketches, models, mock-ups, changeable symbols, motifs, pictograms, realistic drawings, texts and writings (cf. Malchiodi 2002).

Other kinds of documentation of the process consists of letters, e-mails, agendas, administrative documents, formal studies, and relevant texts in mass media. Archival records include service records, organisation records, maps, lists, survey-data and personal records such as diaries, calendars and telephone listings. Physical artefacts are a part of the documentation: The interior, objects at the site, studio work, material experiments, objects made in relation to the process and the material culture.

There are different types of interviews, and in this case focus group interviews have been useful. They are based on *co-operative experiential inquiry* (Hummelvoll 2003; Reason & Heron 1986; Swann 2002). The interviews are done in a real life context to situate and highlight the practical competence of the participants (Fog 2004). In these interviews, art objects have been shown in relation to some of the questions. The interviews are documented by the use of a minidisc, with notes, or in reports.

As both a participant observant researcher and as an art practitioner, who made the art for the hospital, I have a specific access to the fieldwork, seeing the participatory process from the inside, and with a lot of opportunities to gather information about the collective process of creativity. On the other hand, as an insider to the case, there is a danger that the role of the researcher gets too infiltrated with the case itself, that the perspective can become unbalanced. To avoid this, several perspectives are generated through the choice of different research methods. Different views support a higher level of intersubjective understanding. This implies that the study to a higher extent can be useful for other groups of practitioners and researchers.

An independent, professional reference group that see the research activities from a distance is also a part of the study (Reason & Heron 1986). In this case that group was an ethical committee. In Norway, when a case is recommended by an ethical committee, the study is seen as a part of research in the health sector in general, and not only as a study most relevant for art and design research. Such a formal consolidation of cross-disciplinary processes may strengthen the development of participatory design research and its influence in other research fields.

THE HOSPITAL

The findings are related to data that exemplify potentials and pitfalls in relation to the research question: How can a more attentive exploration of phenomena in creative participation with a pluralistic and inclusive basis be done?

The formal demands required, when doing a research project with patients in a hospital setting in Norway, involves several public institutions to evaluate the merit of the project. In this case, the project went through three month long approval process by the Regional Committees for Medical Research Ethics (REK) at the University of Oslo (Berg 2009a). In addition, it had to be recommended by the Norwegian Social Science Data Services (NSD) at the University of Bergen to ensure the data collection to follow the Helsinki-declaration (Statens-Helsetilsyn 1996; Berg 2009a). The evaluations concern the project's ethical perspectives, its research design and the societal need for such a project.



Illustration 1: Rhythmic play with the visual qualities of the architecture (Berg 2009b).

The art project took place in a mental health hospital unit for elderly people. One of the visual interventions created was situated at the door to a patient room (ill. 1): Figurative and abstract motives in tactile porcelain images. The walls had been painted to relate to existing interior architecture. The wall was originally divided vertically in blue and white sections. This vertical division of the wall inspired a horizontal dividing as well. With rhythms in both horizontal and vertical directions, we wanted to play with the visual qualities of the interior architecture. Square areas were painted as a background to the ceramic images. This created a contrast to the images and a relation to the architecture. The rhythms created a sense of movement in the environment. We thought that movement might reduce the feeling of being locked up in a situation (Berg 2009c). The colour and background was repeated several other places in the corridors (see also ill. 2).

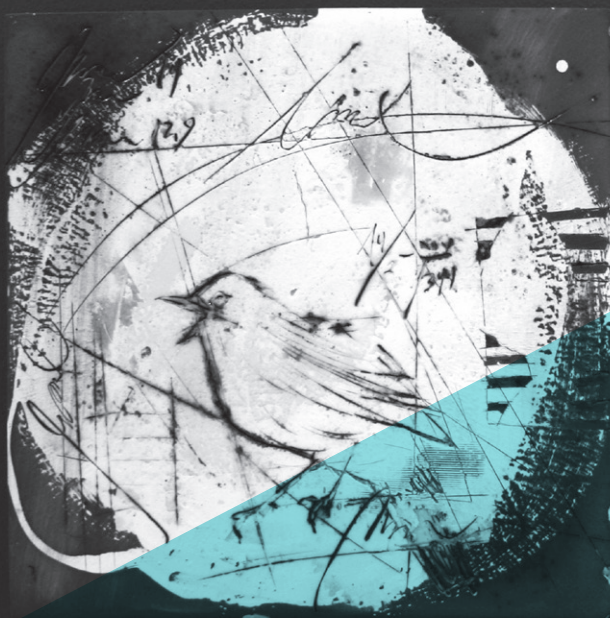
Illustration 2: "I can leave the row and be on my own".



While working on the composition of images on the wall, a co-researcher, a nurse in mental health said: “let’s put one image by the floor, just to see what happens” (ill. 2) (Berg 2009c). Several people at the hospital immediately commented on this: “It might be ruined,” “It is difficult to see,” etc. We debated this with the staff. Inside a hospital there is quite a lot of traffic, transportation of beds and medical equipment. This seems to require an almost industrial looking environment, and such a way of moving would probably be more suitable in industry than in a hospital setting. For this exact reason, we decided to keep the image on the floor. One patient, on her own initiative, said to one of the nurses: “That image down there is me. I can leave the row, and be on my own. If I want to, I can go back to my family” (Berg 2009c). This was the start of a long conversation, developing into a more therapeutic dialogue (Berg 2009e).

Figurative and abstract motifs (ill. 3) invites to different types of interpretations. The compositions were based on research in medical humanities, which clearly shows that a combination of motifs with different levels of abstraction is good, because it gives the patients an opportunity to choose their own level of complexity (Wikström 1994). A female patient said about an abstract motif: “I can see a cave, and there is a woman inside. There is a man outside on his knees. I like abstract images. I also like to look at clouds, and to see how they change. I always see different motifs and they are changing all the time” (Berg 2009c). Another one said: “I like some of the birds, but the others... no... they just look like that.” She then waved her hand quickly around – similar to the movements I actually did, when I made the image, trying to obtain a freshness in the expression (Berg 2009d).

Illustration 3: Figurative and abstract motifs give the patients an opportunity to choose their level of complexity



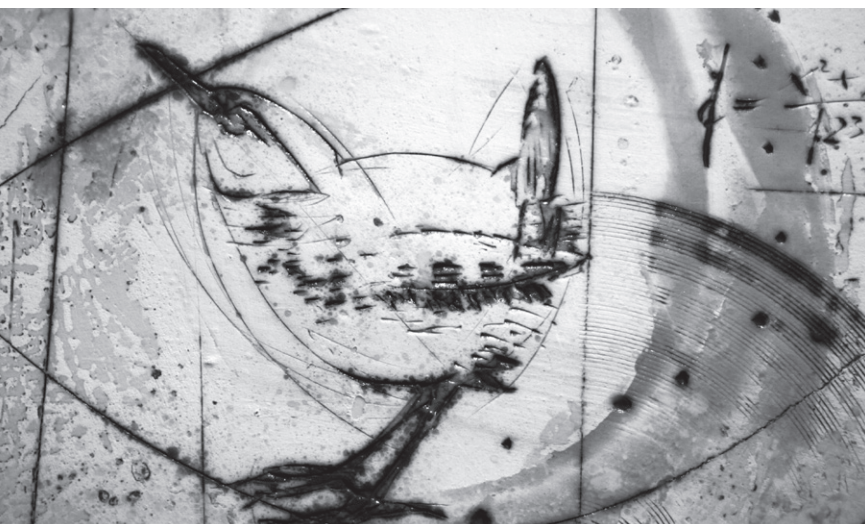


Illustration 4: To touch and experience tactility in the images invites to communication with several senses.

Details in the surface of porcelain images (ill. 4), invites people to communicate with the art, not only by viewing, but also through touch, an important additional sense for patients with reduced mental abilities. A nurse, however, said that she would never touch the images, because after all, it is art. She was afraid to break something. She also mentioned that if you touch art at the National Museum, the alarm goes off (Berg 2009e).



Illustration 5: Art intervention in a mental health care unit: Forms of communication in porcelain (10 cm x 12 cm x 5 cm, and 50 cm x 40 cm x 30 cm). The feel and tactility of shape, size, figurative and abstract motifs invite communication with several senses. This contributes to dialogue and contact between health staff and patients (Berg 2009f).

Another concept was creating objects that were shaped like natural stones. My co-researchers in nursing were invited to comment on what they thought the objects should look like based on their patient experience. Their comments changed *the stone concept* from being a family of quite similar stones, to a collection of quite different shapes (ill. 5). The objects were modelled to be round and flat, small and big. Variation was a guiding line for me.

However, these ceramic objects with abstract and figurative motifs were not put in the patients' sections. Some of the staff were afraid the stones could provoke violent acts in psychotic patients. This was discussed as the patients always had access to coffee cups,

which might also be used for violent acts. The stones were subsequently placed in a basket in the staff lunchroom, and one of the nurses would report on, how the staff related to stones.

One day, the physiotherapist suddenly came up with the idea to take the basket to an activity session with the patients. She then asked them to choose one stone (ill. 5). She had suddenly remembered that she had done the same thing, when she was a student. In the earlier situation, a therapist asked the students to choose among natural stones and describe, why they had chosen as they did. In the same manner, the physiotherapist now encouraged the patients to explain, why they chose one specific stone. But hardly one of them was able to do that. One of the patients showed instead, how the flat stone could be used to throw across a body of water so it bounces or *skips* off the surface of the water. Others were only touching with one finger along the changes in the form.

A nurse remarked that even though there were not many verbal explanations, there was still communication in the patients' body language. The way a stone was held, and how a patient interacted with the stone, told her something about the mood of the patient. Both the physiotherapist and the nurse explained thoroughly, how important the dialogue with the body was. It created a more intimate communication and another quality in the contact experience. Along with these reflections, there was a comparison with the ceramic images on the wall: "The experience to pick up a stone, to be cold on your hands, to be warm on your hands, and to become one with the stone, that is a totally other dimension than to look at an image on the wall" (ill. 6; (Berg 2009e).



Illustration 6: "The experience to pick up a stone, to be cold on your hands, to be warm on your hands, and to become one with the stone, that is a totally other dimension than to look at an image on the wall"

TACIT KNOWLEDGE

There are potentials and pitfalls in participatory design. The findings of my case show that the co-creation with the nurses influences the way art objects are made and how they are used. The research collaboration gives access to the health field in a specific way. The experiences also show that to do participatory design in a hospital environment involves many formal procedures. Several tasks concerning ethical challenges have to be solved. The patient is very well protected, and to an extent that leaves little room for creativity for professionals from other fields.

There is tacit knowledge in both art and nursing. The tacit knowledge comes from different professional experiences and practices and is not easy to understand immediately. It might be compared to entering an unknown culture. How should such an approach be done? Users might misunderstand the intention of the designer; tacit knowledge and professionalism related to design processes might be expressed differently in other professional cultures – in this case mental health care. By involving the people, who are going to experience, and actually be involved with the interventions and the changes these cause, they can have a real influence on the idea. It also influences the realisation of a concept, and it might help the implementation in real life (Schuler & Namioka 1993). The final outcome usually turns out differently than what would have been the case, if someone developed the idea on his or her own.

Based on ideas in participatory design, practitioners who collaborate can share tacit knowledge. By watching one another's work in practice, and by doing things together, gradually an understanding of each other's profession develops. The acceptance of each other's practical work can indeed be explained by the notion of tacit knowledge. The empathy one develops for each other's work is turning into an interiorised experience, named by Michael Polanyi as *indwelling* – in opposition to an outsider's distant observation (Polanyi 1983, 17). Polanyi demonstrates the importance and trustworthiness of tacit knowledge with several other examples, among others a technique used by the police: The facial composite (Polanyi 1983, 5). If an eyewitness is in great doubt of what a criminal looked like, there are methods to help the eyewitness articulate seemingly inaccessible knowledge. Facial composite means that a series of different visual face attributes are shown to the eyewitness, who then, when the visual material is at hand, is able to pick out facial features, which are more or less similar to the criminals face. This method is based on the idea that you might know something about an important matter, but however much you try, you are not able to explain or articulate this in any way through words. The method, used by the police, show that people can make tacit knowledge explicit, when they are given an additional language – beyond words.

The relevance for participatory creative processes is close at hand, as in my case from the hospital. The idea for the nurses in the health sector, and me, the material based artist, was that a series of possible art objects were shown and the subsequent discussion helped identify, which of the objects seemed to be most relevant. We then agreed upon some objects to use, and how some of them could be further developed.

It is worth noting that, although it may seem to be a good solution to simply agree upon choosing some art works, it is not without problems. A point of critique could be that the method is too simple and superficial, because of its reliance on past experiences, which might lead to stereotypical and conserving solutions, and not fully realise the imaginative potential in art. There may be opportunities in a work of art, which have never been imagined or experienced by any of the participants before. Tacit knowledge somehow relies on the memory of earlier experiences, not future solutions. If we revisit the example from composite faces, this means that reconstruction of experiences in a forgotten past is not necessarily a helpful method for creating new artistic experiences for the future.

In the case of the hospital, it is, however, relevant to consider that the nurses, who were involved, had expertise in mental treatment. Mental treatment is very much about letting go of old ways of thinking, and creating openness for something new. Thus, mental treatment is in part based on the past experiences of a patient, but it is also very much about finding new paths, new ways to break out of a vicious labyrinth of thoughts. This is based on the personal knowledge of the patient and the expertise of the nurse. A lot of this knowledge is not explicitly communicated, but develops through a dialogue based on trust. There is a need to create an interpersonal communication, elevated above the old tracks, finding its way for new personal development. If these qualities can be transmitted through collaboration to the resulting products, it might be very useful for the creative process. Tacit knowledge from professionals in mental healthcare therefore seems to be of relevance to a cross-disciplinary dialogue for creating communicative art objects. It enables traditional ideas and understandings to merge with new and unconventional ideas. When these ideas are realised they may be easier to implement, because they are developed attuned to professional knowledge in both fields. The outcome is mutual beneficial.

A NEW CONCEPTION OF DESIGN QUALITIES

The conclusion of the case study is manifold. The findings question design conventions on what is *good form* and what is the meaning of an object. The meaning can be, as exemplified, gradually created in a cooperative approach. The case exemplifies phenomena related to an attentive and explorative approach in the creation of a product for a certain user group. The users can be involved in several ways; patients, nurses, physiotherapists and others.

A case study of a small-scale project in art situated in a hospital environment might visualise elements of interest even to large-scale projects. It might demonstrate important qualities of cross-disciplinary processes in art and health. The role of material based art is just one example related to environmental studies in hospitals. By describing how activities and communication are related to certain places, a deeper understanding of the relation between health and environment is developed. Phenomena that obviously are important in a detailed study could be overlooked in the big picture. By describing how mental health is related to the environment in a hospital setting, the findings of the case might be relevance for other hospitals, or even other kinds of institutions.

The project has been about the process of making experiential objects for elderly people in a mental health unit. Nursing in collaboration with art practice can develop and deepen the communication with the patients. New art products can support new varieties of health practice, exemplified with the physiotherapist, who used the ceramic stones in an unintended way. Additionally, an active use of art objects can help those with reduced abilities to talk and enable alternative, expressive ways of communication. Thus, some people might benefit from a more visual and tactile way of communication; this may act as an icebreaker, when starting a conversation. The use of objects, which create experiences, contributes to more ways of finding conversation subjects. In this way, both the patients and the nurses might experience intellectual stimuli. This can stimulate to more and possibly better dialogue. An increase of communication is seen as a professional strength in nursing (*Wikström 1994*).

For the artist, the cross-disciplinary collaboration might lead to new insights, which inspires to new, innovative products with other types of communicative qualities.

Further studies would be welcome to give insight into, how material based art could influence the development of larger scale projects in similar environments of geriatric psychiatry that provide interaction and care for elderly people, such as interior solutions or architectural solutions. As I have attempted to demonstrate how art practice by an artist researcher generates complementary ways of collecting qualitative data. It would be useful to see similar explorations in other contexts as well, in order to continue to develop the knowledge field of participatory design.

REFERENCES

- Blundell Jones, Peter, Doina Petrescu & Jeremy Till (2005):** *Architecture and Participation*. London: Spon Press.
- Fog, Jette (2004):** *Med samtalen som udgangspunkt: Det kvalitative forskningsinterview*. København: Akademisk Forlag.
- Hummelvoll, Jan Kåre (2003):** *Kunnskapsdannelse i praksis: Handlingsorientert forskningssamarbeid i akuttpsykiatrien*. Oslo: Universitetsforlag.
- Malchiodi, Cathy A. (2002):** *The Soul's Palette: Drawing on art's transformative powers for health and well-being*. Boston: Shambhala.
- Polanyi, Michael (1983):** *The Tacit Dimension*. Gloucester, Mass.: Peter Smith.
- Prosser, Jon (1998):** *Image-based research: A sourcebook for qualitative researchers*. London: Routledge/Falmer.
- Reason, Peter & John Heron (1986):** Research with People: The paradigm of co-operative experiential inquiry. *Person Centered Review* vol.1, no. 4, 456-475.
- Sanders, Elizabeth B.-N. & Pieter Jan Stappers (2008):** Co-creation and the New Landscapes of Design. *CoDesign: International Journal of CoCreation in Design and the Arts* vol 4, no.1, 5-18.
- Schuler, Douglas & Aki Namioka (1993):** *Participatory Design: Principles and practices*. Hillsdale, N.J.: L. Erlbaum Associates.
- Skjervheim, Hans (1996):** *Deltakar og tilskodar og andre essays*. Oslo: Aschehoug.
- Statens-Helsetilsyn (1996):** *Utredning om miljø og helse: Oppfølging av Helsinkideklarasjonen* (Avgitt 05.02.96). Oslo: Statens helsetilsyn.
- Swann, Cal (2002):** Action Research and the Practice of Design. *Design Issues* vol. 18, no. 1, 49-61.
- Wikström, Britt-Maj (1994):** *Pleasant Guided Mental Walks via Pictures of Works of Art: A work of art stimulation programme: Controlled intervention studies of the effect on psychomedical health in elderlywomen*. Stockholm: National Institute for Psychosocial Factors and Health, Karolinska Institute.
- Yin, Robert K. (2003):** *Case Study Research: Design and methods*. Thousand Oaks, Calif.: Sage.

HOSPITAL CASE STUDY PROTOCOL OF EMPIRICAL DATA:

Berg, Arild (2009a): Documentation: Letters, e-mails (January-March).

Berg, Arild (2009b): Direct observations: Photos (January).

Berg, Arild (2009c): Participant observation: Visits in hospital (January-April).

Berg, Arild (2009d): Archival records: Personal records and diaries (January-April).

Berg, Arild (2009e): Interviews: Focus group interview (March).

Berg, Arild (2009f): Physical Artefacts, hospital context, material experiments in studio (January-April).

This material is unpublished.



ABSTRACTS

FROM PAPER SESSION 1:

INTERACTIVE SAMPLE BOOK (ISB)

– AN INSPIRATIONAL TOOL FOR SMART TEXTILES

**Elisabeth Heimdal, Torben A. Lenau, Michel Guglielmi and
Hanne-Louise Johannessen.**

Designers have the responsibility of cooperating with persons from other fields, in order to create synergies, which can generate product or service innovations with high aesthetic and functional qualities. In this perspective, materials and technologies are important aspects of the design process. Using new materials is one of the situations when cooperation with persons from other fields can be particularly fruitful.

The ISB project is a cross-disciplinary project about new materials and technologies involving designers and engineers. It was carried out by Elisabeth Heimdal as her Master thesis from Design & Innovation, The Technical University of Denmark (DTU). Collaboration partners were the design bureau Diffus, textile designer Priya Mani, master student in medialogy at Aalborg University Marija Andonovska and DTU supervisor Torben A. Lenau.

Interactive textiles are still quite an unknown phenomenon to many. It is thus often difficult to communicate what kind of potentials lie within these. This is why the ISB project was started as a practice based research project, with the aim of exploring and communicating some of the possibilities with interactive textiles. The result of the project is two prototypes of interactive textiles that constitute the developed inspirational tool. The first prototype is called *The textile that can move*, and the second one *The textile that has eyes and blinks back to you*. The aim of the tool is to build a bridge between technology and design. They will function as an inspirational tool for designers, students, cultural institutions and companies that wish to start working with some of the possibilities within interactive textiles.

DESIGN FOR ANYBODY, SOMEBODY OR NOBODY? CHALLENGES IN DESIGNING FOR INSTITUTIONAL SETTINGS WITH MULTIPLE USERS

Hanne Lindegaard and Rikke Okholm

The paper discusses the characteristics of institutional design in hospitals, where studies illustrate how design considerations revolve around medical work practice, technology, hygiene standards, efficiency and marginalising patients, relatives and nurses in the design process. Preliminary research indicates that the hospital designs have standards, which lead us to wonder who the hospital is designed for? The study involves users in hospitals through ethnographic studies by identifying places and situations where different use practices are objects of observation and dialogue. *Design:labs* (Binder 2007) were arranged in order to engage the multiple users in future design of hospitals. The theoretical approach is interdisciplinary and based on practice theory (Shove *et al.* 2007) and actor network theory (Akrich 1992; Oudshoorn & Pinch 2003; Latour 1999). It furthermore includes historical research.

INNOVATION BY PARTICIPATORY DESIGN – A MATERIAL BASED ART PROJECT IN MENTAL HEALTH CARE

Arild Berg

Full paper included in TEXTS section.

FROM PAPER SESSION 2:

TRACING IDEOLOGY IN DESIGN TEXTS: AN OVERVIEW

Martina Maria Keitsch

Full paper included in TEXTS section.

DESIGN CRITERIA BASED ON AESTHETIC CONSIDERATIONS

Bente Dahl Thomsen

In a scientific context, it is a problem that arguments for aesthetic qualities of products are unclear since science is traditionally based on clear or explicit statements. Our idea to solve this issue is to obtain a structured design process and better articulation of the form and accentuation of its aesthetic qualities. This is done by first encouraging the students to use systematic clarification of the leading feature on the basis of Danish sculptor Erik Thommesen's division of form into form elements. Secondly, to continuously support selections of the best variant as the basis for the next step in the process, using German philosopher A. G. Baumgarten's aesthetics. And finally, to encourage the designers to use the same principles in their documentation for achieved aesthetic quality. Baumgarten's *bright method* actually describes the application of the leading feature, which gives: A main idea, a structural principle for the form element and a content (which provide a work's richness and evidence of power and life).

OUT OF THE BOX: COMMUNICATING WITH CONSUMERS THOROUGH PACKAGE DESIGN

Sanna Honkaniemi

No abstract available.

ANALYSING CONCEPT BUILDING AND VISUAL COMMUNICATION WITHIN HEAVY METAL MUSIC

Toni-Matti Karjalainen, Laura Laaksonen and Antti Ainamo

The paper presents early results from a research project that, among other objectives, explores how visual concepts are built and meanings are created in the music industry. Focus is on the genre of heavy metal in general, and on the context of Finnish metal music export in specific. Data is collected through a number of case studies, concerning a number of Finnish metal bands and a complementary collection of selected foreign bands. Data sources comprise interviews with the members of the bands and their stakeholders, analysis of their visual communication, as well as secondary sources

such as public interviews, articles, and other publications. The working paper presented at the seminar discusses a tentative model for analysing concept building and visual communication in the case of selected bands. The paper incorporates two interdependent parts: description of (1) underlying constructions that affect the visual concept creation and (2) a typology of visual identity in the case of metal bands.

FROM PAPER SESSION 3:

RESPONSIBILITY THROUGH DESIGN, DESIGN THROUGH RESPONSIBILITY. THE CASE OF THE ITALIAN SMART METER: AN ATTEMPT TO REMEDIATE ITS NON-RESPONSIBILITY

Simone Marian and Alvisè Mattozzi

Full paper included in the TEXTS section.

INDUSTRIAL DESIGNERS IN INDUSTRY CLUSTERS: A BRIEF STUDY OUTLINE

Emma Linder

Industrial designers are faced with different situations that require knowledge connected to product type as well as to the context of designing. One example is industry clusters, which are geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions in a distinct field that compete but also cooperate. The density of locally and culturally situated practices and the entrepreneurial air of many industry clusters present opportunities for designers, but also condition their practice. New product development is typically distributed and structured according to the product architecture. Designers in industry clusters are therefore challenged in their work by heightened social and cultural dimensions. These are preliminary findings from two apparently disparate contexts: The Norwegian ship building industry, and the Italian cluster of sports and leisure shoe manufacturers in Montebelluna.

RADICAL INNOVATION IN MARITIME RESEARCH AND DEVELOPMENT

Snorre Hjelseth

No abstract available.

FROM PAPER SESSION 4:

RAISING DESIGNERS' AWARENESS WITH THE KNOWLEDGE OF PSYCHOLOGICAL MECHANISMS IN ORDER TO CREATE THE HAPPY AND CARING CONSUMER

Tore Gulden

No abstract available.

ENSURING SOCIALLY RESPONSIBLE PACKAGING DESIGN

Birgitte Geert Jensen and Sofie Hartvig Widding

Most consumers have experienced occasional problems with opening packaging. Tomato sauce from the tinned mackerel splattered all over the kitchen counter, the unrelenting pickle jar lid, and the package of sliced ham that cannot be opened without a knife or a pair of scissors. The research project "User-friendly Packaging" aims to create a platform for developing more user-friendly packaging. One intended outcome of the project is a guideline that industry can use in development efforts. The project also points the way for more extended collaboration between companies and design researchers. How can design research help industry in packaging innovation?

THE USE OF DESIGN GAMES IN THIRD WORLD RESEARCH

Marie Louise Møllebæk Larsen and Hanne Lindegaard

Full paper included in TEXTS section.

FROM PAPER SESSION 5:

FORESIGHT, TRENDS AND MATERIALS – INSPIRATION FOR FUTURE PRODUCTS

Torben A. Lenau and Stine Brahm Lauritsen

For many years the functional performance in products has been used to distinguish a product from competing products. Examples are speed and convenience in cars, computer power in laptops, weight in bicycles, weather resistance in clothes, etc. However as many of the functional properties become easier to achieve, consumer preferences and competition moves to other areas.

The semiotic properties becomes more and more important since consumers more increasingly select between products based on the meaning associated to the product appearance. Semiotics is the study of signs and symbols as described by authors like Charles Sanders Peirce and Ferdinand de Saussure. Customer preferences also keep changing over time and an important question to producers is therefore, which appearance preferences the customers will demand in the future. A model for how to perform foresight and translate this into consumer trends is presented in this paper together with a facility called *The Future Tool* that support designers with inspirations and material samples. The present version of The Future Tool is based on the theme (*Safe*) *Haven 2011+*, addressing the need for feeling secure in an uncertain world.

New materials and techniques are interesting, when designing new products since they contribute with a long range of novel and improved physical properties like durability, weight, strength, appearance, environment and reduced unit cost. In a trend perspective, the new materials open for more advanced and sophisticated semiotic properties.

BLING! MAKES PEOPLE TALK

Despina Christoforidou and Elin Olander

Bling emanates from the rap culture and is primarily associated with large pieces of golden jewelry covered with diamonds. Some rap artists wear these very visible, obvious, glittering and glitzy pieces of jewelry in order to draw attention to their person and to manifest success and status. The excessive stylistic expressions and luxurious material qualities of bling generate a lot of attention and some even

feel provoked. Either way, bling products possess many powerful characteristics and as such, from a product communication point of view, they qualify as a highly interesting topic to study further.

We intend to explore how it is possible to use the power bling wields in the design context in a positive way. This paper provides an outline of how bling can be studied in order to refine a definition, which can be used to understand the characteristics and semantics of bling products; we propose a combined study containing internet searches, questionnaires and interviews, and experimentation. The methods proposed and the initial findings are presented and discussed briefly.

SEX, GOD & LUXURY DESIGN

Nicholas Rhodes

Full paper included in TEXTS section.

FROM PAPER SESSION 6:

DESIGN RESPONSIBILITY AS REFLECTIVE PRACTICE: AN EDUCATIONAL CHALLENGE

Joy Boutrup, Malene Leerberg and Vibeke Riisberg

An important element in design education is to prepare students for the reality of the design profession. Often design students question their ability and power to influence industry and commerce. This paper discusses how the notion of design responsibility can be integrated and how we educate responsible designers. Using examples from the curriculum of the Kolding School of Design, we make a case for employing both practice-based and theory-based learning approaches to promote a critical and reflective design practice. Furthermore, we argue for the value of teaching design responsibility to imbue design students with the knowledge and confidence that design and the designer *can* make a difference.

TEACHING PRODUCT SEMIOTICS FROM A PRACTICE BASED POINT OF VIEW

Anna Thies

The overall theme of the seminar is the notion of design responsibility. When asking a design student "why" s/he designed in a certain way one can often get the answer "because it felt right". Asking "how" might be answered by "I got inspired".

Teaching product semiotics to design students functions as an eye opener to many of them. They become aware of how even small nuances in their design influences the interpretation of the designed object (or service). A structured way of analysing and synthesising design through product semiotics leads to awareness. Partly an awareness of the displacement of possible interpretations influenced by context, and partly an awareness of a product's (or a service's) communicative content. This awareness enables the designer to make conscious decisions in relation to given (or expected) circumstances and to consciously design for product understanding. These are prerequisites for sustainable and attractive product (or service) design.

TOWARDS A TYPOLOGY OF EMOTIONAL EXPERIENCES WITH THINGS

Viktor Hjort Af Ornäs

To develop things that make responsible contributions to everyday experiences, there is a need for structuring knowledge on how users find things meaningful. While emotions, pleasure, etc. elicited in relation to products have gained increasing attention, frameworks relating to various dimensions of user experience are still incoherent, and methodological advice, regarding how such issues can be handled in design processes, is scarce. This paper describes a work in progress on experiences with things, based on 300 self-reports from 53 participants. The analysis is not yet completed but the paper introduces some tentative results, regarding how antecedents of experience with things may be categorised, taking Activity Theory as a starting point.





What are we going to do?
How do we know?

LETTER
TO
THE
FUTURE

What are we going to do?
How do we know?

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